DOCUMENT RESUME

ED 206 240 HE 014 311

AUTHOR	Dresner, Bruce M.
TITLE	Results of the 1980 NACUBO Comparative Performance Study and Investment Questionnaire.
INSTITUTION	National Association of Coll. and Univ. Business Officers, Washington, D.C.
SPONS AGENCY	Continental Illinois National Bank and Trust Co., Chicago.
PUB DATE	81
NOTE	134p.: For related document see HE 014 310.
AVAILABLE FROM	National Association of College and University Business Officers, One Dupont Circle, Washington, DC 20036 (members $25.00, nonmembers $50.00).
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Budgeting: *Educational Economics: *Endowment Funds: Financial Policy: Fiscal Capacity: *Higher Education: *Income: *Investment: *Money Management: National Surveys: Productivity

ABSTRACT

The purpose of the annual National Association of College and University Business Officers' (NACUBO) Comparative Performance Study is to aid administrators in evaluating the performance of their investment pools. The 1980 study contains two parts: (1) comparative performance information and related investment performance statistics: and (2) other endowment statistics. All performance figures are computed using annual data supplied by participating institutions: confidentiality is maintained by use of institutional codes, with selective non-performance data identified by institution when deemed valuable. Performance information includes a list of participating institutions and their life income and endowment funds, performance analysis, asset composition, risk measurement, stock and bond turnover, investment advisory fees and discretion. Endowment characteristics information includes general information on endowment growth and real growth and life income funds, fiscal 1980 endowment and gifts to endowment, endowment spending and support, investment management and custody matters, and investment policy and practice. In most cases, data and some analysis are presented. Exhibits include an alphabetized list of participants representing 198 pools, characteristics of participating investment pools, a detailed performance summary of average annual total return, a list of institutions that apply total return for budgeting purposes, index of investment managers, and index of endowment custodians. Notes on performance measurement methodology and an explanation of computations are appended. (MSE)

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RESULTS OF THE 1980 NACUBO
COMPARATIVE PERFORMANCE STUDY
AND
INVESTMENT QUESTIONNAIRE

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by

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Under the Direction of
the NACUBO Investment Committee

HE 014 311

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Results of the 1980 NACUBO Comparative Performance Study and Investment Questionnaire

The NACUBO Investments Committee hereby conveys its thanks to the many persons who made this study possible. These include: the business officers who voluntarily supplied data and answered the questionnaire; Bruce Dresner, who serves so capably as survey coordinator; Dartmouth College, which provides the use of its computer; and the organizations that provided financial support for this year's study.

Sponsorship Support: Organizations that contribute $1,000 or more.
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PREFACE

The purpose of the annual NACUBO Comparative Performance Study (CPS) is to aid administrators in evaluating the performance of their investment pools.

The CPS was begun in 1971 as an expansion of a survey conducted in prior years by Dartmouth College. Although the study originally gathered information only on performance, it now includes an investment questionnaire which provides additional pertinent information relating to endowment funds and their management.

The 1980 study contains two parts: Section I--comparative performance information and related investment performance statistics, and Section II--other endowment statistics.

Throughout the study all performance figures are computed using annual data supplied by participating institutions. The theory behind the methodology for the investment pool comparative performance computations is described in Appendix I. Performance calculations are explained in detail in Appendix II. Performance information received from investment services or produced internally may vary from results in this report if such figures are based on other than annual data or computed in a different manner. While it is believed the results can be viewed with considerable validity, a very deviant response or an exceptional outcome should be treated with caution.

The confidential nature of participant responses to investment performance questions has been maintained through use of code numbers. However, select non-performance data has been identified by institution in the belief that this information is most useful when so identified.

Inquiries pertaining to the content of this report or to the methodology for the investment pool comparative performance computations should be addressed to Bruce M. Dresner, NACUBO Survey Coordinator, P.O. Box 31, Hanover, New Hampshire 03755, (603) 646-2445. Additional copies of this report are available through the NACUBO office at $25 per copy for members, $50 for non-members. (Orders must be prepaid.) A Summary Comparative Performance Study is available at $5 per copy.

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RESULTS OF THE NACUBO 1980 COMPARATIVE PERFORMANCE STUDY AND INVESTMENT QUESTIONNAIRE

SECTION I -- INVESTMENT PERFORMANCE

INTRODUCTION

Participants

The 1980 NACUBO Comparative Performance Study (CPS) contains information as of June 30, 1980, on 198 college and university investment pools.* These institutions have endowment and life income funds of approximately $15.1 billion at market value. The total for all U.S. college and university endowment funds was $16.8 billion, according to the most recent (1979) HEGIS data (one year's difference between NACUBO and HEGIS data).

The institutions in the NACUBO survey are categorized by size as follows:

Table 1

Participating Institutions

(In Millions of Dollars)

Endowment Size	Number Reporting	Life Income Funds	Endowment Funds	Total
$100 million and over	36	$330	$10,893	$11,223
$50 to $100 million	24	104	1,715	1,819
$10 to $50 million	77	94	1,802	1,896
Under $10 million	39	11	180	191
TOTAL	176	$539	$14,590	$15,129

---

*The terms "endowment" and "investment pools" are not synonymous. All of an institution's endowment funds may not be contained in its investment pool(s). Investment pools might include--besides true, quasi, or term endowment--other funds retained in the endowment and similar funds group, such as life income funds, loan funds, and temporarily invested plant funds.

A detailed list of participating institutions ranked by order of endowment size is provided as Table 3, page 3, of this report. As a further helpful reference, an alphabetical listing of institutions participating in the CPS is also provided as Exhibit I, page 58.

Exhibit II, page 60 contains a coded listing as of June 30, 1980, of characteristics of the pools.

Investment Objectives

Of the 198 investment pools, 78 (39%) follow a total return investment philosophy, 106 (54%) follow a balanced investment philosophy, and 14 (7%) follow an income-oriented philosophy. These three objectives are defined as follows:

Total Return - Investment returns are sought from both market appreciation and dividends and interest; current income requirements generally do not dictate the kind of securities that may be held because primary emphasis is on long-term overall return.

Balanced - The pooled funds are invested in such a manner as to minimize investment risks without unduly sacrificing current income or the possibility for some long-term growth. This is usually done by investing a portion of the pool in fixed income securities.

Income Oriented - Investment policy is dictated by current income needs; market appreciation is never utilized for current operating purposes, and primary emphasis is on current maximization.

For performance comparison purposes the latter groups have been combined. Only four pools changed their investment objective during the year. Three of these changed from balanced to total return while one changed from income-oriented to total return.

Size of Investment Pools

For performance comparison purposes the investment pools have been categorized by size as follows:

Table 2

Investment Pools by Size

Size of Pools	1974 Number	1980 Number	Approximate Value of Pools at June 30, 1980
Over $50 million	33	57	$11,379,015,000
$10 to $50 million	43	85	2,029,943,000
Under $10 million	71	56	242,829,000
TOTAL	147	198	$13,651,787,000

From 1974 to 1980 the size of the investment pools participating in the Comparative Performance Study has increased. In 1974, 48% of the pools in the study were under $10 million, while in 1980 only 29% were in that category. Correspondingly, the $10 million to $50 million group increased from 29% to 43%, and the over $50 million group increased from 22% to 28%.

Pool Characteristics

In terms of characteristics, 148 of the pools were described as official pooled endowment funds. Seventeen were described as combinations of more than one separately invested unitized fund; 16 as pools consisting of only those assets over which management has discretion; 11 as separately invested funds which have been unitized to enable performance to be accurately measured; and 6 as official pooled life income funds.

Pool Composition

Of the 198 pools, 140 contained true and quasi-endowment funds, 25 contained only true endowment funds, and 3 contained only quasi-endowment funds. The 30 remaining pools included not only endowment funds but also investments of other fund groups.

Validity of CPS Data

Because NACUBO is dealing with a wealth of data, errors in compiling results may occur. Numerous checks have been incorporated over the years to keep such inconsistencies to a minimum. However, if the data supplied NACUBO (unit value and income per unit figures) are erroneous, the probability is that only very deviant figures will be spotted. Except for obvious erroneous and deviant figures, all data provided are treated as correct. Although each institution is responsible for the accuracy of data, it is felt that a high degree of reliability can be placed on the raw data supplied. Unit values and income per unit figures for over 75% of the pools in the NACUBO CPS are contained in independently audited financial reports, and over 90% are reported either in the institution's or their board of trustee's annual report.

Table 3

ENDOWMENT AND LIFE INCOME FUND ASSETS
RANKED BY ENDOWMENT MARKET VALUE AT JUNE 30, 1980
(000 Omitted)

	Institution	Life Income Funds	Endowment Funds
1	Harvard University	$17,573	$1,584,580
2	The University of Texas	3,633	1,261,320
3	Yale University	6,400	668,800
4	Stanford University	84,874	557,740 (A)
5	Columbia University	4,200	553,000
6	Princeton University	6,791	547,750
7	Massachusetts Institute of Technology	11,651	421,258
8	University of Chicago	12,000	342,300
9	Rice University	12,649	329,035
10	Cornell University	22,006	328,696

	Institution	Life Income Funds	Endowment Funds
11	New York University	1,346	281,473
12	Northwestern University	12,731	275,238
13	Emory University	1,842	265,818
14	Washington University	5,774	238,613
15	Rockefeller University	325	228,563
16	University of Pennsylvania	0	224,510
17	Johns Hopkins University	6,286	198,063
18	Dartmouth College	17,885	197,609
19	California Institute of Technology	27,324	187,632
20	University of Notre Dame	3,592	172,222
21	University of Southern California	17,025	166,610
22	Vanderbilt University	18,043	154,493
23	McGill University	0	145,200
24	University of Virginia	269	142,311
25	Duke University	6,924	135,082
26	Wellesley College	7,925	131,953
27	University of Delaware	94	131,915
28	Case Western Reserve University	11,540	125,207
29	Brown University	0	123,356
30	Carnegie-Mellon University	923	119,195
31	Wesleyan University	749	116,804
32	Smith College	0	108,614
33	University of Michigan	7,117	106,128
34	University of Minnesota	170	105,986
35	University of Pittsburgh	264	103,937
36	Southern Methodist University	581	101,552
37	Williams College	2,768	96,805
38	Rensselaer Polytechnic Institute	4,049	93,404
39	Oberlin College	3,582	93,064
40	Swarthmore College	4,321	91,016
41	University of Cincinnati	4,092	90,121
42	Berea College	3,337	86,536
43	Vassar College	9,441	86,445
44	Amherst College	2,280	83,975
45	University of Richmond	557	77,536
46	Ohio State University	1,103	76,342
47	Brandeis University	3,649	67,009
48	Georgetown University	1,632	66,195
49	Wake Forest University	757	65,526
50	Loyola University	194	65,156
51	Lehigh University	5,179	61,924
52	Middlebury College	1,901	60,019
53	Lafayette College	1,632	59,952
54	Rochester Institute of Technology	1,229	59,459
55	Pomona College	36,478	58,913
56	Mount Holyoke College	3,171	58,203
57	State University of New York at Buffalo	85	57,613
58	Carleton College	2,373	53,970
59	Syracuse University	9,129	53,400
60	Thomas Jefferson University	750	52,825
61	Bowdoin College	3,413	46,507
62	Boston University	1,518	46,171
63	Bryn Mawr College	0	45,336 (M)
64	Earlham College	665	43,890
65	Grinnell College	3,509	43,332

Institution	Life Income Funds	Endowment Funds
66 Trinity College (Conn.)	682	42,992
67 Hamilton College	1,684	41,241
68 Academy of the New Church	0	40,901
69 Cooper Union	121	39,750
70 University of Miami	4,416	38,546
71 Worcester Polytechnic Institute	1,070	38,085
72 Occidental College	6,146	37,743
73 University of Wisconsin System	0	37,453
74 Bucknell University	623	35,611
75 Agnes Scott College	0	35,339
76 Colgate University	2,914	34,904
77 Willamette University	1,394	33,807 (M)
78 Haverford College	808	33,052
79 Rutgers, The State University of New Jersey	6	32,407
80 Hampton Institute	0	32,356
81 Colorado College	0	31,534
82 Baylor College of Medicine	0	30,787
83 University of Missouri	1,709	30,445
84 Drew University	0	28,265
85 Whitman College	5,206	28,262
86 Colby College	1,715	26,352
87 Ohio University	0	25,758
88 University of Vermont	207	25,665
89 Columbia University Teachers College	201	25,283 (A)
90 Davidson College	0	25,263
91 Claremont Mens College	11,280	25,155
92 Mills College	491	24,864
93 University of Denver	1,864	23,946
94 University of Santa Clara	3,173	21,641
95 Berry College	39	21,156
96 University of Tennessee	10,701	20,832
97 College of Wooster	0	20,229
98 Sweet Briar College	140	19,912
99 University of Illinois	181	19,557
100 Simmons College	3	19,292
101 Rhode Island School of Design	41	19,135
102 George Washington University	0	19,064
103 Hendrix College	1,711	18,474
104 Denison University	2,681	18,095
105 Marquette University	68	17,588
106 University of Maryland	0	17,574
107 Cornell College	0	17,439
108 Dickinson College	1,558	17,426
109 Ohio Wesleyan University	1,605	17,418
110 Albion College	1,260	16,569

	Institution	Life Income Funds	Endowment Funds
111	Wheaton College	270	16,119
112	University of Wisconsin Foundation	2,721	15,737
113	Pennsylvania State University	1,322	15,479
114	Oregon State Board of Higher Education	0	15,086
115	Clark University	1,168	14,900
116	Pratt Institute	0	14,768 (A)
117	Spelman College	0	14,460
118	Michigan State University	183	14,231
119	University of Puget Sound	1,809	13,707
120	Alma College	127	13,310
121	Reed College	1,671	13,293
122	Furman University	2,260	13,269
123	Kalamazoo College	787	12,943
124	Franklin and Marshall College	2,312	12,883
125	Baldwin-Wallace College	594	12,740
126	Connecticut College	88	12,255
127	Allegheny College	496	12,234
128	Indiana University	1,378	12,160
129	Drake University	132	12,086 (M)
130	University of Tulsa	117	11,856
131	Temple University	0	11,707
132	University of Arizona	0	11,607
133	Wittenberg University	816	11,420
134	Catholic University of America	0	11,415
135	Washburn College	0	11,027
136	Georgia Institute of Technology	0	10,758
137	University of Maine	0	10,489
138	Mercer University	321	10,272
139	Hollins College	0	9,924
140	University of Dayton	0	8,997
141	Kenyon College	478	8,792
142	Muhlenberg College	0	8,744
143	Hobart and William Smith Colleges	121	8,604 (M)
144	St. Norbert College	0	8,099
145	Ohio Northern University	0	7,277
146	Alfred University	0	6,683
147	University of Nebraska	0	6,669
148	Clarkson College of Technology	814	6,324
149	University of Evansville	72	6,312
150	Doane College	497	6,096
151	University of Arkansas	255	5,895
152	Carroll College	203	5,866
153	The American University	0	5,306
154	Hope College	1,376	5,191
155	Virginia Military Institute	0	5,113
156	Medical College of Pennsylvania	251	4,960
157	Washington State University	40	4,811
158	Oregon State University Foundation	4,485	3,882
159	University of Akron	0	3,580
160	Stephens College	0	3,565
161	Philadelphia College of Textiles and Science	0	3,522

	Institution	Life Income Funds	Endowment Funds
162	Chapman College	38	2,925 (M)
163	Arizona State University	510	2,815
164	University of Oregon Foundation	0	2,737
165	University of Tampa	68	2,286
166	Newberry College	0	2,221
167	University of Connecticut	0	1,778
168	University of Akron Development Foundation	433	1,774
169	Eastern Michigan University	48	1,637
170	University of Mississippi	0	1,585
171	Oakland University	0	1,513
172	Western Michigan University	794	1,484
173	Monmouth College	0	1,398
174	Trinity College (D.C.)	0	1,367
175	Westmar College	240	817
176	State University of New York at Binghamton	18	570

NOTE: (A) Figures are as of August 31, 1980
(M) Figures are as of May 31, 1980

PERFORMANCE

How Did Endowment Pools Do in 1979-80?

The purpose of the NACUBO Comparative Performance Study is to aid administrators in evaluating their endowment pool's investment performance. Measuring comparative performance among pools with similar characteristics, objectives, and risk levels is useful in understanding the investment results achieved with respect to desired goals.

- For the year ending June 30, 1980, the 198 participating college and university pools had an average rate of return of 11.9%. This rate exceeds the 9.5% average rate of return earned by a composite of the S&P 500 Index, the Salomon Brothers Bond Index, and the average Treasury Bill rate using the same asset composition as the average investment pool (51.7% equities, 28.8% long term bonds, 14.7% cash and equivalents, 1.6% real estate, and 3.2% other assets).
- The study also shows that for the three year period ending June 30, 1980, the 8.4% average rate of return of the college and university pools exceeded the 6.7% rate of the composite market index.
- For the five-year period ending June 30, 1980, the 8.1% average return of the endowment pools was higher than the 7.3% rate of the composite index.
- In terms of investment objectives, those pools with a "total rate of return" objective outperformed those with "balanced" and "income" objectives. The total rate of return pools on average were 64% invested in equities over the past five years, while the balanced pools were only 53% invested in equities.
- The study reveals that on average the larger pools (over $50 million) outperformed the smallest pools during the past year, and for the three-, five-, and ten-year periods measured. This group also outperformed the $10-50 million group for the one- and three-year periods, and equalled the results of the middle-sized group for five-year period. However, for the ten-year period, the pools ranging in size from $10 to $50 million dollars performed best. The pools under $10 million underperformed the two larger size pools for the four time periods reviewed.
- Those investment pools which were managed externally during the year ending June 30, 1980, after adjusting for their respective asset compositions, did on average about two percentage points better than those managed internally. In 1979 results were about equal. However, for each of the two previous years the internally managed pools outperformed those managed externally.
- Investment pools which were more actively managed, i.e., had higher than average stock and bond turnover percentage rates, on average outperformed those pools which had lower turnover rates.

- Investment pool assets continued to shift from equities, an occurrence which has taken place every year since NACUBO began collecting such data in 1974. Pool assets also continued to shift toward bonds. This has happened in every year except 1977, when bond positions remained stable.

To provide a more definitive understanding of how an institution might interpret its investment pool performance, the performance for the average investment pool is presented in Table 4 for the one-, three-, five-, and ten-year periods ending June 30, 1980. Exhibit III, page 67, shows the detailed results for each pool participating in the 1980 CPS.

Table 4

Average Performance by Period

	Period Ended June 30, 1980			
	One Year	Three Years	Five Years	Ten Years
All Investment Pools Measured	11.90%	8.41%	8.12%	7.77%
By Investment Ojective:				
Total Return Pools	13.57	9.42	8.46	8.05
Balanced or Income Pools	10.81	7.77	7.90	7.57
By Size:				
Over $50 million	14.27	9.58	8.59	7.84
$10 to $50 million	12.66	8.97	8.56	8.06
Under $10 million	8.38	6.39	6.92	6.97
Comparative Indices:				
Dow-Jones Industrial Average	9.45	3.98	4.98	7.15
S&P 500 Index	17.13	9.89	8.67	8.93
Salomon Brothers Bond Index	-3.66	.61	5.15	6.63
Kuhn Loeb Bond Index	-2.16	1.53	6.25	N/A
Other Benchmarks:				
The Common Fund for Equity Investments	22.78	17.45	11.72	N/A
The Common Fund for Bond Investments	.30	3.87	N/A	N/A

While one year is too short a time period from which to draw any significant conclusions regarding performance, for the year ending June 30, 1980, 65% of the 198 pools in the CPS outperformed the Dow-Jones Industrial Average. This widely followed benchmark should not be the sole measure used when comparing the performance of the average endowment investment pool. A better measure, but one still not completely representative for comparative purposes, is the S&P 500 Index. Seventeen percent of the 198 pools outperformed the S&P 500 in 1979-80, which was a period of increasing stock prices. This is not surprising since most endowment pools maintain a balanced investment mix and are not totally invested in stocks. Almost all of the endowment investment pools outperformed the Salomon Brothers Bond Index. This too is not suprising due to the large stock component of these funds and to the short-term liquid asset cash position of most pools after a year of unusually high money market yields. For those few pools totally invested in either common stocks or long-term bonds, a direct comparison to the S&P 500 Index or Salomon Brothers Bond Index, respectively, is more valid.

Table 5

Investment Pools Which Outperformed the Popular Indices

Period Ended June 30, 1980	Dow-Jones Industrial Average	S&P 500 Index	Salomon Brothers Bond Index
One Year			
Number of Pools Measured	198	198	198
Number Outperforming Index	129	34	197
Percent	65%	17%	99%
Three Years			
Number of Pools Measured	187	187	197
Number Outperforming Index	174	56	197
Percent	93%	30%	100%
Five Years			
Number of Pools Measured	176	176	176
Number Outperforming Index	165	64	163
Percent	94%	36%	93%
Ten Years			
Number of Pools Measured	127	127	127
Number Outperforming Index	79	27	96
Percent	62%	21%	76%

Some may consider the above summary incomplete in that it does not take into account important considerations concerning a specific investment pool, such as the pool's objective (which might be quite different from that of either the stock or bond indices), its risk posture (which in most instances is below that of the stock market but above the bond market), and other policy constraints which have been placed on the pool.

The 1976 CPS marked the first time NACUBO attempted to evaluate investment pool performance on a "risk-adjusted" basis. For fiscal 1978, it was noted that on a risk-adjusted basis significant value was added to endowment performance by investment management. In 1979 results were consistent with what might be expected. 1980 results show that significant value was added above what might be expected.

It is also helpful to view performance in the context of the distribution of the investment pool returns. Graph I shows the performance distribution for all investment pools.

In Exhibit III, the total return for each pool is listed, along with the relative ranking of each pool for the one-year, three-year, five-year, and ten-year periods ending June 30, 1980.

What should be of interest and concern to trustees and those administrators responsible for an investment pool is the return achieved from a blend of market indices that mimics their own pool. In the case of the average pool, this means the return achieved as a result of the investment of its 51.7% stock component, 28.8% bond component, 14.7% cash component, 1.6% real estate component, and 3.2% miscellaneous assets component. (This is the first year NACUBO requested information regarding the real estate component of endowment pools, which previously was reported as part of miscellaneous assets.) On this basis, the one-year return of 11.90% for all investment pools appears favorable compared with the return of 9.52% which might be expected based on the asset components of the pool shown in Table 6.

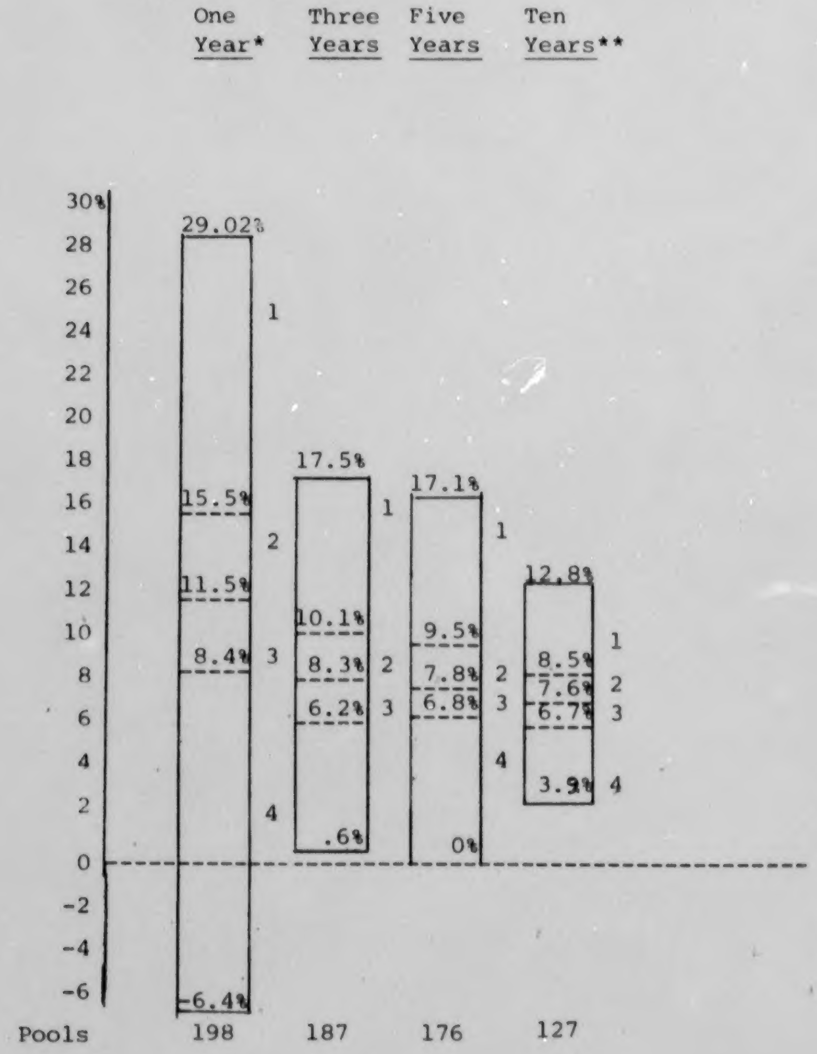
Table 6

Estimated Asset Component Return of All Investment Pools for the One-Year Period Ending June 30, 1980

Asset Component	Index	Fiscal 1979-80 Total Return Percent	Average Investment Pool Asset Component	Expected Total Return
Stocks	S&P 500	17.13%	51.7%	8.89%
Bonds	Salomon Brothers	-3.66	28.8	-1.05
Cash	Av. Treas. Bill	11.42	14.7	1.68
Real Estate	N/A	0	1.6	0
Miscellaneous	N/A	0	3.2	0
TOTAL			100.0%	9.52%

GRAPH I

Quartile Performance Distribution Of All Investment Pools For Periods Ended June 30, 1980



*Excludes Pool E89, +42.4% in which real estate assets were appraised to market value; these had previously been carried at book value.

**Excludes the extraordinary results of Pool C99, +29.49%, in which a very successful unconventional investment had been made.

Table 7 shows an analysis of the components which make up total return.

Table 7

Total Return Performance for the One-Year Period Ending June 30, 1980

	Change In Market Value	Income Return*	Total Return
Average Investment Pool	4.50%	7.40%	11.90%
Dow-Jones Industrial Average	3.09	6.36	9.45
S&P 500 Index	11.01	6.02 6.12	17.03 17.13
Salomon Brothers Bond Index	-11.92	8.26	-3.66
Kuhn Loeb Bond Index	-10.43	8.27	-2.16
Average One-Year Treasury Bill Rate	0	11.42	11.42

*Assumes reinvestment of income based on the average of the beginning and ending year market values (see Appendix I, page 113).

7.22 Table 8 indicates the income return to be expected from various types of assets. The 7.17% expected income return using the asset component analysis is close to the actual income return of 7.40% of the average pool shown in Table 7. The return would have been closer if some assumption had been made regarding real estate and miscellaneous assets. Assuming a 5% income return for these assets, which represent 4.8% of total assets, the expected income would have been 7.41%.

Table 8

Income Performance for the One-Year Period Ending June 30, 1980

Asset Component	Index	Fiscal 1979-80 Income Percent Return	Average Investment Pool Asset Component	Expected Income Return
Stocks	S&P 500	6.02% 6.12	51.7%	3.11% 3.16
Bonds	Salomon Brothers	8.26	28.8	2.38
Cash	Av. Treas. Bill	11.42	14.7	1.68
Real Estate	N/A	0	1.6	0
Miscellaneous	N/A	0	3.2	0
TOTAL			100.0%	7.17% 7.22

Performance Summary

The average total return of the endowment investment pools is considerably better (238 basis points) than what might be expected based on the asset components of the funds (11.90% compared to 9.52%). This could be for a number of reasons. Perhaps assuming no return at all on 4.8% of the assets (real estate and miscellaneous) is unduly understating expected performance. If a 10% return were assumed for these assets, the favorable spread of actual results to expected results would be reduced to 190 basis points. Perhaps the S&P 500, the Salomon Brothers Index, and the average Treasury Bill are not representative of the type of stocks, bonds, and short-term investment vehicles used by college and universities. For example, perhaps the stocks held have different capitalizations and performance than the S&P 500, which is heavily weighted toward large capitalized stocks. Perhaps the bonds held were of different quality and maturity than the Salomon Index, which is composed of high quality long-term bonds. Perhaps the short-term cash investments were in bankers acceptances, certificates of deposit, commercial paper, or the Common Fund for Short-Term Investments, which might have produced a greater return than the Treasury rate. Whatever the reason for this good performance, such a comparison does take into account important constraints, such as a fixed income-to-equity ratio, placed on the manager by the institution's trustees. Therefore, it does appear significant value was added by management.

Table 9 shows that investment management also achieved a significant average annual incremental return of 1.74% for the three-year period ending June 30, 1980, and .84% for the five-year period.

Table 9

All Pools

Actual Returns Compared to Asset Component Returns
for the Five-Year and Three-Year Periods Ending June 30, 1980

	Actual Return	Expected Total Return	Difference
5 Years	8.12%	7.28%	.84%
3 Years	8.41	6.67	1.74

Performance by Investment Objective

As can be seen in Table 4, page 9, for the one-year period ending June 30, 1980, the major broad market index for measuring stock performance (the S&P 500 Index) shows a significantly larger total return than did the major index for measuring bond performace (the Salomon Brothers Bond Index). Inasmuch as the pools with total return as an investment objective were on average 58.1% invested in stocks as compared to 47.5% for the pools with a balanced objective, and had a lower average bond exposure of 22.8% verses 32.7%, one would expect the total return pools to outperform the balanced pools. This, in fact, was the case for the year ending June 30, 1980. The total return pools had a total return of 13.57% as compared to 10.81% for the balanced pools--a difference of 2.76%. Applying the asset component analysis (as in Table 6), to each group of pools, one would expect the total return pools to show an 10.89% return and balanced pools a 8.55% return, a difference of 2.34%. Table 10 shows that on a risk-adjusted basis, total return pools appear to have performed 42 basis points better than balanced pools. Both total return and balanced pools exceeded expected returns by 268 and 226 basis points, respectively.

Table 10

Actual Returns Compared to Expected Total Returns for the One-Year Period Ending June 30, 1980

	Actual Return	Expected Total Return*	Difference
Total Return Pools	13.57%	10.89%	2.68%
Balanced or Income Pools	10.81	8.55	2.26
Difference	2.76%	2.34%	.42%

*Calculated the same as in Table 6.

Over the shorter three-year term total return pools nominally outperformed balanced pools, and the reverse was the case for the five-year period. No conclusions can be reached for the ten-year period because sufficient data on investment pool asset component percentages are not available.

Table 11

Total Return Pool and Balanced Pool
Actual Returns Compared to Expected Total Returns
for the Five-Year and Three-Year Periods Ending June 30, 1980

5 Year	Actual Return	Expected Total Return*	Difference
Total Return Pools	8.46%	7.85%	.61%
Balanced or Income Pools	7.90	6.83	1.07
Difference	.56%	1.00%	-.46%
3 Year			
Total Return Pools	9.42%	7.31%	2.11%
Balanced or Income Pools	7.77	6.25	1.52
Difference	1.65%	1.06%	.59%

*Calculated the same as in Table 6 for each year, and results compounded on an average annual basis.

Performance by Size

For the one-, three-, and five-year periods ending June 30, 1980, the over $50 million size group performed best, followed by the $10-$50 million group. For all four periods ending June 30, 1980, pools under $10 million underperformed the other pools. However, the five-year differences in returns between the two larger groups were not significant, and for the ten years the $10-$50 million group did slightly better.

Table 12 shows that in terms of expected total returns based on asset mix, the over $50 million group outperformed the smaller groups in every time period, and the under $10 million group underperformed the other groups in every time period. Actual returns were greater than expected returns in all periods except the five-year period for the under $10 million group.

Table 12

Actual Returns Compared to Expected Total Returns By Endowment Size For the Five-Year and Three-Year Periods Ending June 30, 1980

5 Years	Actual Return	Expected Total Return*	Difference
Over $50 million	8.59%	7.42%	1.17%
$10 to $50 million	8.56	7.26	1.30
Under $10 million	6.92	7.06	-.14
3 Year			
Over $50 million	9.58%	7.02%	2.56%
$10 million to $50 million	8.97	6.78	2.19
Under $10 million	6.39	6.08	.31
1 Year			
Over $50 million	14.27%	10.29%	3.98%
$10 to $50 million	12.66	10.53	2.13
Under $10 million	8.38	8.15	.23

*Calculated the same as in Table 6 for each year, and results compounded on an average annual basis.

Equity Only and Bond Only Peformance

The 1977 CPS marked the first time NACUBO reported equity only and bond only performance. Separate data were provided on the equity portion of 24 pools and on the bond portion of 16 pools. For the 1978 CPS the number of participating equity and bond pools remained about the same, and for the 1979 study there are 26 equity pools and 14 bond pools, and for the 1980 study there were 29 equity pools and 21 bond pools. The performance of these pools is shown on Table 13. This table shows that only 8 equity pools (28%) outperformed the S&P 500 and 22 (76%) outperformed the Dow-Jones Industrial Average. All bond pools outperformed the Salomon Brothers Index. The tables on pages 88 and 89 show the respective three-year and five-year performance for stock only and bond only pools.

Table 13

Equity Only and Bond Only Performance Comparison
For The One-Year Period Ending June 30, 1980

Equity Only

	Code Name	Total Return
1	EQUITY 19	48.91%
2	EQUITY 4	31.97
3	EQUITY 29	29.02
4	EQUITY 6	25.86
5	EQUITY 13	23.22
6	COM-FDEQ	22.78
7	EQUITY 5	21.28
8	SP-IND	18.35
9	EQUITY 7	17.97
10	EQUITY 25	17.63
11	SP500	17.13
12	EQUITY 1	16.28
13	EQUITY 10	16.24
14	EQUITY 16	14.77
15	EQUITY 18	14.51
16	EQUITY 8	14.38
17	EQUITY 12	14.24
18	EQUITY 22	14.18
19	EQUITY 15	14.03
20	EQUITY 9	13.98
21	EQUITY 17	13.34
22	EQUITY 14	13.21
23	EQUITY 23	12.27
24	EQUITY 27	11.97
25	EQUITY 21	10.88
26	D-JONES	9.45
27	EQUITY 20	9.38
28	EQUITY 28	9.08
29	EQUITY 11	7.72
30	EQUITY 26	7.5
31	EQUITY 2	7.42
32	EQUITY 24	5.51
33	EQUITY 3	5.36
34	COM-FDBD	0.3
35	LEH-KUHN	-2.16
36	SALOMON	-3.66
AVERAGE OF 29 POOLS		15.93

Bond Only

	Code Name	Total Return
1	COM-FDEQ	22.78%
2	SP-IND	18.35
3	SP500	17.13
4	BOND 21	13.48
5	BOND 14	12.2
6	BOND 2	11.52
7	BOND 10	9.75
8	BOND 1	9.64
9	D-JONES	9.45
10	BOND 17	8.92
11	BOND 18	6.79
12	BOND 3	5.81
13	BOND 11	5.21
14	BOND 13	4.26
15	BOND 9	4.06
16	BOND 8	4.02
17	BOND 20	3.79
18	BOND 19	3.33
19	BOND 5	3.05
20	BOND 4	2.86
21	BOND 16	2.41
22	BOND 7	1.97
23	BOND 12	1.59
24	COM-FDBD	0.3
25	BOND 15	-0.26
26	LEH-KUHN	-2.16
27	BOND 6	-3.05
28	SALOMON	-3.66
AVERAGE OF 21 POOLS		5.3

Internal Investment Management Performance

Of the 198 investment pools in the 1980 Comparative Performance Study, 32 are managed internally. The size of these pools is shown in Table 14.

Table 14

Internal Investment Management

Pool Size (Market Value)	Number in Each Group
Greater than $100 million	11
$50 million to $100 million	2
$25 to $50 million	4
$10 to $25 milion	7
$5 to $10 million	1
Under $5 million	7
TOTAL	32

The one-year total return for the 32 pools managed internally was 9.80%, significantly below the 12.39% for the 166 pools managed externally. In 1979 the average return for pools managed internally was almost identical to that of those managed externally. In 1978 the return for internally managed pools was 3.66%, compared to 2.28% for the 139 pools managed externally. In the 1977 CPS, the internally managed pools also outperformed the externally managed pools, 6.05% compared to 4.88%.

The 1980 asset components of internally and externally managed pools are shown in Table 15. Because of their higher equity and lower bond positions, it would be expected that externally managed pools would perform better. This did appear to be the case. Based on their respective asset components the expected performance for internal pools was 8.95% and for external pools, 9.62%. Both groups actually performed better than might be expected--internal pools by .85% (9.80-8.95%) and external pools by 2.69% (12.39-9.62%).

Table 15

Asset Composition of Internally and Externally Managed Investment Pools at June 30, 1980

	Internally Managed	Externally Managed
Stocks	48.1%	53.1%
Bonds	29.7	27.9
Cash	15.4	14.0
Real Estate	2.0	1.5
Miscellaneous	4.8	2.8
TOTAL	100.0%	100.0%

ASSET COMPOSITION

Summary

Table 16 shows the asset composition of the investment pools as of June 30, 1980. On the average 52.8% of the pooled funds were invested in stocks and 28.1% in bonds. As one would expect, the pools with a total return investment objective were more heavily invested in stocks (59.5%) than were balanced fund pools (48.3%). It can also be seen that the larger sized pools had greater amounts invested in stocks than did the smaller pools.

Table 16

Asset Composition of Pools by Size and Type at June 30, 1980

	By Investment Objective			By Size		
	All Pools	Total Return	Balanced	Over $50 Million	$10 to $50 Million	Under $10 Million
Stocks	52.8%	59.5%	48.3%	58.2%	55.5%	43.3%
Bonds	28.1	21.5	32.5	25.0	25.4	35.0
Cash	14.2	15.6	13.3	11.4	13.3	18.4
Real Estate	1.8	1.3	2.2	2.3	2.6	.3
Miscellaneous	3.1	2.1	3.7	3.1	3.2	3.0
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

For the most recent five years, 1976 through 1980, the average asset composition by size and investment type is shown in Table 17.

Table 17

Average Asset Composition of Pools by Size and Type From Fiscal 1976 to Fiscal 1980

Pools Over $50 Million	Stock	Bond	Cash	Real Estate	Misc.	Total
1980	57.5%	25.3%	12.0%	2.0%	3.2%	100.0%
1979	59.9	25.5	11.4	N/A	3.2	100.0
1978	60.2	26.3	10.0	N/A	4.5	100.0
1977	61.8	26.3	7.7	N/A	4.2	100.0
1976	63.5	24.2	7.3	N/A	5.0	100.0
5 Year Average	60.6	25.5	9.7	N/A	N/C	100.0
3 Year Average	59.2	25.7	11.1	N/A	N/C	100.0
Pools $10 to $50 Million						
1980	54.0	26.3	13.4	2.4	3.9	100.0
1979	54.1	27.2	14.3	N/A	N/C	100.0
1978	56.6	28.5	10.4	N/A	N/C	100.0
1977	61.3	27.0	7.0	N/A	N/C	100.0
1976	61.2	25.4	7.0	N/A	N/C	100.0
5 Year Average	57.4	26.9	10.4	N/A	N/C	100.0
3 Year Average	54.9	27.3	12.7	N/A	N/C	100.0
Pools Under $10 Million						
1980	42.4	35.9	19.3	.2	2.2	100.0
1979	43.8	38.4	15.7	N/A	N/C	100.0
1978	51.9	35.2	11.1	N/A	N/C	100.0
1977	55.1	33.3	9.2	N/A	N/C	100.0
1976	59.1	27.3	9.7	N/A	N/C	100.0
5 Year Average	50.5	34.0	13.0	N/A	N/C	100.0
3 Year Average	46.0	36.5	15.4	N/A	N/C	100.0
Total Return Pools						
1980	58.1	22.8	15.5	1.2	2.4	100.0
1979	60.0	22.5	14.9	N/A	N/C	100.0
1978	64.3	23.0	9.9	N/A	N/C	100.0
1977	67.5	22.0	7.2	N/A	N/C	100.0
1976	69.1	16.9	9.6	N/A	N/C	100.0
5 Year Average	63.8	21.4	11.4	N/A	N/C	100.0
3 Year Average	60.8	22.8	13.4	N/A	N/C	100.0
Balanced or Income Pools						
1980	47.5	32.7	14.1	2.0	3.7	100.0
1979	48.6	34.1	13.6	N/A	N/C	100.0
1978	54.8	34.0	10.7	N/A	N/C	100.0
1977	56.3	32.9	8.3	N/A	N/C	100.0
1976	56.8	30.7	7.5	N/A	N/C	100.0
5 Year Average	52.8	32.9	10.8	N/A	N/C	100.0
3 Year Average	50.3	33.6	12.8	N/A	N/C	100.0

Shifts in Investments

The net change in asset composition over the year results from a combination of two factors. The first is a change in stock and bond prices; the second is a shift in investments. Tables 18 through 20 show the estimated shift in investments made by management decision for all pools, and for pools grouped by size and investment objective. To the June 30, 1979, asset composition figures is applied the change in market price of each type of investment to arrive at projected asset composition figures for June 30, 1980. The actual composition amounts are then subtracted from the projected amounts to arrive at the net change caused by shifts in investments. The increase of 11.01% in the market price of the S&P 500 Index is used to arrive at the projected stock figure, while the decrease of 11.92% in market price of the Salomon Brothers Bond Index is used to arrive at the projected bond figure. The projections assume no market price change for cash, real estate, or miscellaneous assets. While these computations do not provide a precise measurement of shifts in investments, they do provide estimates which can be studied.

Table 18

Change in Asset Composition Caused by Shifts in Investments -- All Pools

	June 30, 1979	June 30, 1980		
	Actual	Predicted	Actual	Difference
Stocks	50.7%	55.1%	52.8%	-2.3%
Bonds	29.5	25.5	28.1	+2.6
Cash	15.1	14.8	14.2	- .6
Real Estate	1.4	1.4	1.8	+ .4
Miscellaneous	3.3	3.2	3.1	- .1
TOTAL	100.0%	100.0%	100.0%	

Table 19

Change in Asset Composition Caused by Shifts in Investments
All Pools 1974-1980

Percent Change -- Year Ended June 30

	1974	1975	1976	1977	1978	1979	1980	Total
Stocks	-4.0%	-1.2%	-2.2%	-1.1%	-4.8%	-3.3%	-2.3%	-18.9%
Bonds	1.3	3.9	4.2	.0	0.6	1.3	2.6	13.9
Cash	3.0	-2.9	-1.7	1.0	-4.2	1.9	-0.6	4.9
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.4	0.4
Miscellaneous	-0.3	0.2	-0.3	0.1	0	0.1	-0.1	- 0.3

Table 20

Change in Asset Composition Caused by Shifts In Investments by Size and Type

Percent Change -- 1974 Through 1980

Total Return	1974	1975	1976	1977	1978	1979	1980	Total
Stock	-5.1%	-0.5%	-3.7%	-0.2%	-6.2%	-4.2%	-1.5%	-21.4%
Bond	0.1	2.6	5.8	0.2	1.7	1.5	1.0	12.9
Cash	5.0	-2.7	-1.4	0.5	4.6	1.8	0.7	8.5
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.3	0.3
Miscellaneous	0	0.6	-0.7	-0.5	-0.1	0.9	-0.5	-0.3
Balanced								
Stock	-3.5	-1.9	-1.4	-1.4	-4.1	-2.8	-3.0	-18.1
Bond	2.0	4.7	3.3	- .2	0	0.9	3.9	14.6
Cash	1.9	-2.8	-1.4	1.3	4.1	2.0	-1.4	3.3
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.5	0.5
Miscellaneous	-0.4	0	-0.1	0.3	0	-0.1	0	- 0.3
Over $50 Million								
Stock	-4.5	-1.9	-1.3	-0.5	-1.5	-1.8	-2.9	-14.4
Bond	-0.1	5.1	1.3	-0.9	-1.1	1.2	3.1	8.6
Cash	4.7	-3.4	-1.4	1.7	2.7	0.7	-0.7	4.3
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.7	0.7
Miscellaneous	-0.1	0.2	1.4	-0.3	-0.1	-0.1	-0.2	0.8
$10 to $50 Million								
Stock	-3.5	-2.9	-1.6	-0.9	-6.3	-2.6	-1.6	-19.4
Bond	0.5	4.3	4.3	-0.9	1.7	0.7	2.1	12.7
Cash	3.6	-2.1	-1.4	1.5	4.8	1.3	0.2	7.9
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.5	0.5
Miscellaneous	-0.6	0.7	-1.3	0.3	-0.2	0.6	-1.2	- 1.7
Under $10 Million								
Stock	-4.2	0.2	-3.4	-1.7	-5.1	-5.2	-2.8	-22.2
Bond	2.1	2.9	5.7	1.6	0.4	1.7	2.8	17.2
Cash	2.2	-3.0	-1.8	0.2	4.7	3.5	-1.8	4.0
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.2	0.2
Miscellaneous	-0.1	-0.1	-0.5	-0.1	0	0	1.6	0.8

Shifts in Investments from 1974 through 1980

Since NACUBO began gathering data on shifts in investment in 1974, endowment investment pools have been continuously decreasing their exposure to stocks, as shown in Table 21. Conversely, every year pools have increased their bond exposure, except for 1977 when it appeared that no shifting in bonds occurred. In retrospect, this generally proved unfavorable. In all years except 1974 and 1977 stocks outperformed bonds. In regard to shifting cash, endowment investment pools would have been best served if cash had been increased in 1974 and 1978, and this was in fact the case.

Table 21

Yearly Total Return for One-Year Treasuries, the Salomon Brothers Index, and the S&P 500

Fiscal Year	Average One Year Treasury	Salomon Brothers Bond Index	S&P 500 Index
1980	11.42%	-3.66%	17.13%
1979	9.85	6.75	13.47
1978	6.49	- .97	- .16
1977	5.57	14.65	.46
1976	6.54	10.08	13.81
1975	7.48	14.51	15.22
1974	8.03	-7.46	-14.48

Distribution of Asset Composition

Table 22 shows the asset composition distribution for all pools by investment objective and size.

Table 22

Distribution of Asset Composition as of June 30, 1980

	By Objective			By Size		
	All Pools	Total Return	Income or Balanced	Over $50 Million	$10 to $50 Million	Under $10 Million
Percent Invested in Stocks						
90-100%	4	4	0	1	2	1
80-90%	5	2	3	1	3	1
70-80%	27	15	12	11	12	4
60-70%	33	15	18	11	16	6
50-60%	50	24	26	17	24	9
40-50%	31	10	21	9	11	11
30-40%	22	3	19	2	9	11
0-30%	22	4	18	2	8	12
Not Answered	4	1	3	3	0	1
TOTAL	198	78	120	57	85	56
Percent Invested in Bonds						
90-100%	0	0	0	0	0	0
80-90%	3	0	3	0	0	3
70-80%	3	0	3	0	2	1
60-70%	2	0	2	1	0	1
50-60%	9	3	6	1	4	4
40-50%	21	2	19	3	7	11
30-40%	38	10	28	12	11	15
20-30%	60	29	31	19	31	10
10-20%	33	18	15	11	19	3
0-10%	25	15	10	7	11	7
Not Answered	4	1	3	3	0	1
TOTAL	198	78	120	57	85	56

Asset Diversification

In general, investment pools tended to hold more stocks than bonds. As shown in Table 23 the smallest size group had the smallest ratio of the number of stocks to bonds. Also, total return pools tended to have stock positions (53 holdings) about two and one-half times their bond positions (19 holdings), and balanced pools tended to have stock positions about one and one-half times their equity positions.

The total distribution of bond and stock positions for all pools and for the different size categories is portrayed in Graph II on pages 27 and 28.

Table 23

Asset Diversification for Bonds and Stocks as of June 30, 1980

	Median Number of Bonds Held	Median Number of Stocks Held
All Pools	27	51
By Investment Objective:		
Total Return	22	56
Balanced	29	46
By Size:		
Over $50 million	40	100
$10 to 50 million	27	52
Under $10 million	18	30

Equity Price Earnings Ratio - "P/E"

Institutions were asked on an optional basis to provide the price earnings ratio (P/E) for the equity portion of their investment pools as of June 30, 1980. The average P/E for 40 pools was 9.0 compared to 7.3 for the Dow-Jones and 7.5 for the S&P 500.

Non-Controllable Assets

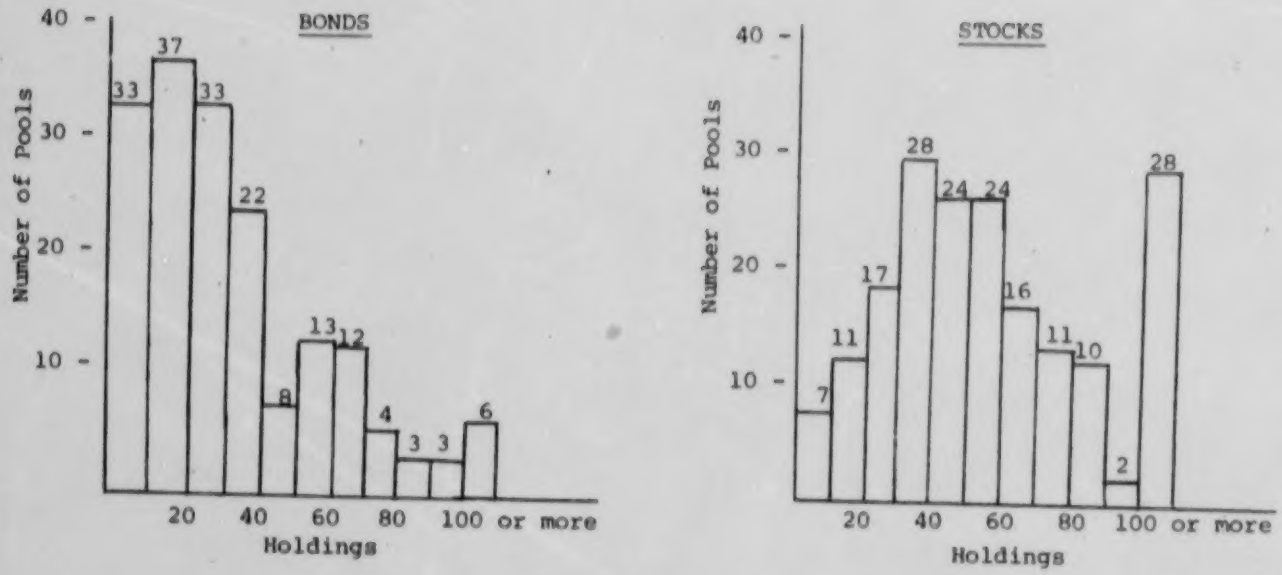
Non-controllable assets are those which although included in investment pools are not truly marketable or not included in the pool solely on their investment merit, i.e., investment in a dormitory, investment letter stock, donor restricted stock, etc.

Of the 198 pools, 160 (81%) had non-controllable assets of 5% or less, 26 had non-controllable assets of between 5% and 15%, 8 between 15% and 25%, and 4 had non-controllable assets of greater than 25%. Non-controllable assets for all pools represented 3% of the total assets of the pools as of June 30, 1980.

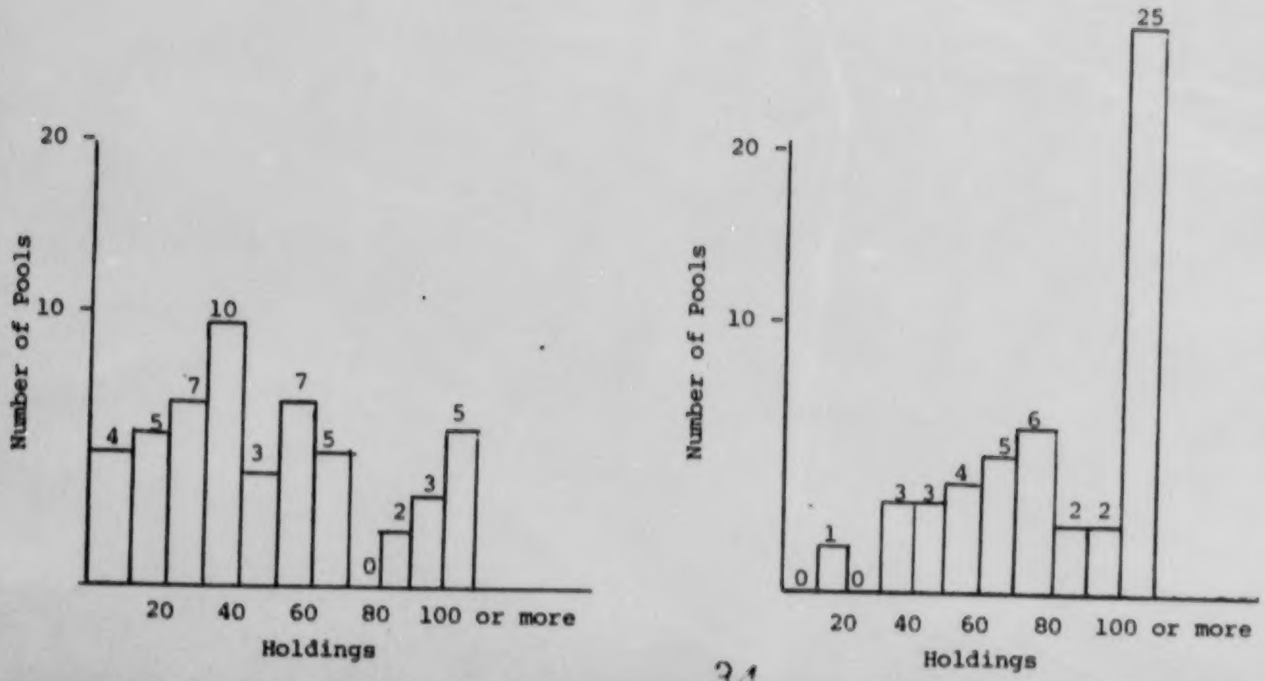
GRAPH II

Asset Diversification
(1979-80)

ALL POOLS

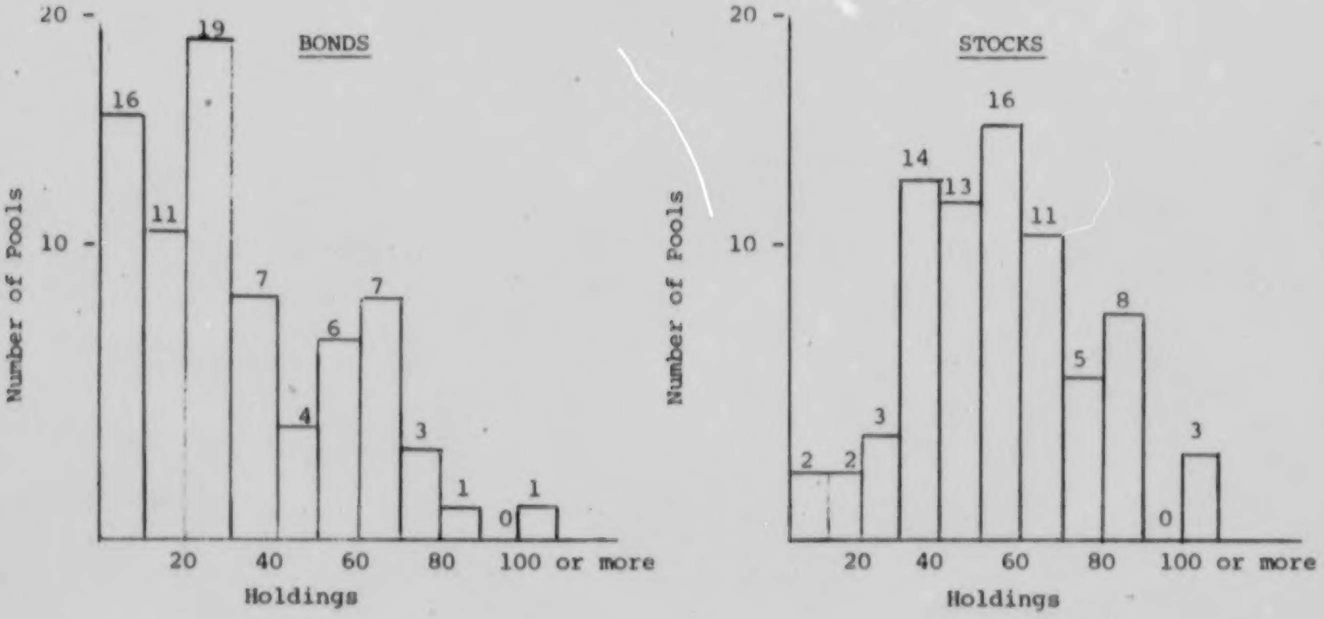


OVER $50 MILLION

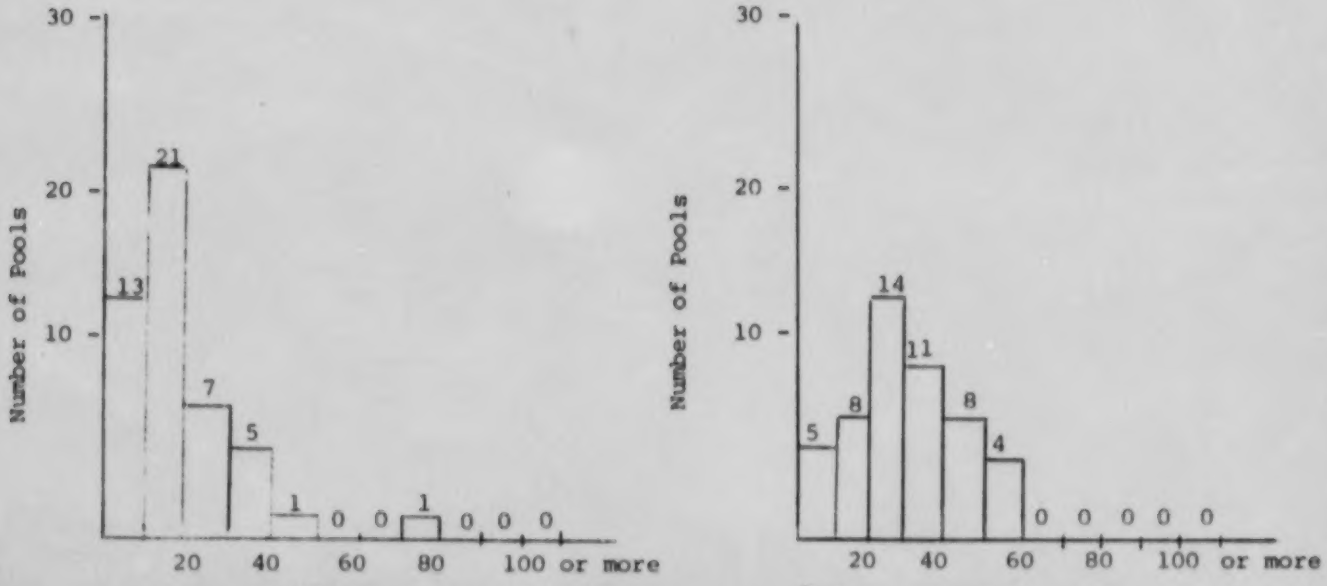


GRAPH II
(cont.)

Asset Diversification
$10-$50 Million



Under $10 Million



RISK MEASUREMENT AND RETURN

Description

There presently remains considerable controversy as to whether superior investment managers do exist and hence can produce an incremental return relative to the amount of risk taken, or whether the only way above average long-run return can be achieved is by assuming greater risks. Risk is defined as a greater variability in return. A particular risk measure now widely used is an index of relative volatility, which is also known by the Greek letter "beta." The beta calculation or risk is essentially a comparison between the movements of returns from the market as a whole.*

Volatility as a measurement of risk was introduced into the Comparative Performance Study in 1975 and has been contained therein since that time. In calculating such statistical measures, reliability is higher when information is gathered over a long period of time. Although more accuracy would be achieved by using quarterly data, the data used in this study provide reasonably reliable results if there is adequate diversification of investment pool assets, and the asset composition return is similar to what might be expected. That is, stocks are more risky than bonds, and bonds are more risky than Treasury bills. Correspondingly, in up markets stock should do better and Treasury bills worse, and in down markets just the opposite should occur.

In a regression analysis an investment pool's beta measure is the percentage fluctuation that can be expected and therefore predicted based on the performance of the stock market. Generally, the S&P 500 Index is used as the market base. A beta of 1 means that a pool should move in unison with the market. If the market goes up 10%, the pools should go up 10%. A beta of more than 1, say 1.10, means the pool is 10% more volatile. When the market goes up, a more volatile pool should perform better than the market; it should perform worse when the market goes down. On the other hand, a pool that is less volatile (lower beta) should not perform as well in an up market but not lose as much in a down market. Any change in value will vary from that predicted by the beta measure if, and to the extent that, a pool is not thoroughly diversified and therefore exhibits distinct, unique characteristics not correlated to the market in general.

Observations

Table 24 shows beta coefficients calculated for the investment pools in the study. College and university endowment funds appear to be invested for less volatility and risk than the market as a whole. One would expect their performance to be below that of the stock market as a whole in a period of a rising market as was the case in fiscal 1975, 1976, 1979, and 1980 and above the stock market in a period of declining market as was the case in fiscal 1977 and 1978. As shown in Table 25, total return pools are more volatile (greater beta) than balanced pools, and the larger the size of pools the more volatile. This seems logical since total return pools and larger pools have greater stock components, and stocks have historically been more volatile than bonds.

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*Managing Risk In An Uncertain Era, Malkiel & Firstenberg, Princeton University Press, 1976.

Table 24

Comparative Performance Study
Historic Beta of All Investment Pools

10 Years Ending June 30	10 Year Beta
1975	.69
1976	.72
1977	.71
1978	.73
1979	.72
1980	.70

Table 25

Beta Coefficients

	Ten Years Ending June 30, 1980
By Investment Objective:	
Total Return Pools	.75
Balanced Pools	.67
By Size:	
Over $50 million	.75
$10 to $50 million	.69
Under $10 million	.66
Comparative Indices:	
Dow-Jones Industrial Average	.82
Salomon Brothers Bond Index	.37
S&P 500	1.00

STOCK AND BOND TURNOVER

Method of Calculation

Turnover, as reported in this study, is determined by dividing the lesser of stock purchases or sales by the average of the beginning and end year market values of stocks. For example, a portfolio with $80 million in stocks at June 30, 1979, and $100 million at June 30, 1980, that purchased during the year $25 million in stocks and sold $18 million, would have had a turnover of 20% -- $18 million in sales divided by $90 million. This same methodology is used for bond turnover.

1980 Stock Turnover

For all institutions, 1980 stock turnover of 21.7% was the highest since NACUBO began gathering these data in 1974-75, as shown in Table 26. This is also the case when pools are grouped by investment objective or by size. In 1980, and in five of the last six years, turnover for total return pools has been greater than for balanced pools. Based on size, the smallest group has had the least equity turnover in 1980 and also in four of the last five years.

1980 Bond Turnover

This is only the third year NACUBO has been gathering data on bond turnover. For both 1978 and 1979 turnover of balanced pools has been about twice the turnover of total return pools. In 1980 the reverse was the case: turnover of total return pools was twice that of balanced pools. The smaller the size group of pools the lower the turnover. This has proved a consistent pattern for all three years. Pools over $50 million in size had more than three times the turnover of pools between $10 and $50 million in size in 1979, and about twice the turnover in 1978 and 1980.

Table 26

Stock Turnover

	Median Response					1979-80	
	1974-1975	1975-1976	1976-1977	1977-1978	1978-1979	Median Response	Number Responding
All Pools	17.0%	16.1%	15.1%	14.3%	18.0%	21.7%	161
By Investment Objective:							
Total Return Pools	17.4	16.1	15.1	17.0	24.3	28.0	61
Balanced Pools	16.5	15.8	16.1	13.5	16.4	20.0	100
By Size:							
Over $50 million	19.7	15.4	15.0	15.3	20.5	26.4	42
$10 to $50 million	17.0	15.5	20.8	17.0	19.0	22.3	72
Under $10 million	14.4	18.0	11.4	12.0	15.8	18.0	47
Bond Turnover							
All Pools				13.7	15.5	15.0	153
By Investment Objective:							
Total Return Pools				9.6	18.5	26.4	56
Balanced Pools				20.0	33.8	12.5	97
By Size:							
Over $50 million				28.4	48.8	26.0	41
$10 to $50 million				12.4	13.0	14.0	66
Under $10 million				7.7	10.9	10.6	46

Stock and Bond Turnover and Performance Implications

For 1980, the 25 pools with the highest stock turnover ratios outperformed the 25 pools with the lowest turnover ratios by approximately 2 1/2 percentage points, and the 25 pools with the highest bond turnover outperformed the 25 pools with the lowest turnover by about 2 percentage points. In general, this is similar to the findings of prior years' studies as shown in Table 27. The 1980 results of the 25 pools with the highest and lowest stock and bond turnover are shown in Tables 28 and 29.

Table 27

Performance Comparison of the 25 Pools with the Highest and Lowest Stock and Bond Turnover Percentages

	25 Highest	25 Lowest	Basis Point Difference
Stock Pools			
1980	12.90%	10.38%	252
1979	11.23	10.16	107
1978	3.71	1.69	202
1977	4.60	3.29	131
1976	9.84	8.26	158
Bond Pools			
1980	11.22	9.20	201
1979	10.47	8.21	226
1978	2.34	2.55	-21

Table 28

Pools with the Highest and Lowest Equity Turnover Percentage* for the One-Year Period Ending June 30, 1980, Ranked According to Average Total Return

Highest Turnover				Lowest Turnover			
Rank	Code Name	1980 Turnover Percent	1980 Average Total Return	Rank	Code Name	1980 Turnover Percent	1980 Average Total Return
1	C14	196.0%	27.78%	1	E94	4.3%	29.02%
2	COM-FDEQ		22.78	2	COM-FDEQ		22.78
3	C66	129.0	21.49	3	C77	9.3	22.64
4	E86	63.7	19.13	4	E26	8.3	20.13
5	E36	68.0	18.39	5	SP-IND		18.35
6	SP-IND		18.35	6	SP500		17.13
7	C29	80.0	18.10	7	E46	7.2	14.86
8	C35	55.7	17.64	8	E3	8.9	14.17
9	SP500		17.13	9	C55	2.4	11.88
10	C57	290.0	16.17	10	C1	5.3	11.44
11	E56	72.0	16.04	11	E75	0.1	10.71
12	C39	229.0	15.64	12	C86	3.3	10.46
13	E20	52.0	14.82	13	C75	8.1	9.79
14	E70	89.0	13.89	14	E74	8.5	9.69
15	E29	53.0	13.57	15	D-JONES		9.45
16	E63	122.0	12.98	16	E18	1.2	9.43
17	C2	85.0	12.87	17	E44	3.0	9.19
18	E65	65.2	12.77	18	E77	9.3	9.17
19	C43	57.5	11.77	19	C79	7.9	8.58
20	C21	58.2	10.03	20	C97	6.6	8.47
21	E47	110.0	9.98	21	E14	6.0	8.27
22	D-JONES		9.45	22	C11	4.3	7.89
23	E64	131.0	8.87	23	C59	0.1	7.82
24	C76	84.7	8.12	24	C38	7.4	6.38
25	E10	138.0	7.92	25	E48	8.7	5.87
26	E4	138.0	5.47	26	C61	1.9	5.63
27	E24	80.0	4.68	27	E22	5.8	3.22
28	E13	95.0	2.49	28	C10	0.0	2.64
29	E23	60.6	2.01	29	C33	1.3	2.23
30	COM-FDBD		0.30	30	COM-FDBD		0.30
31	LEH-KUHN		-2.16	31	LEH-KUHN		-2.16
32	SALOMON		-3.66	32	SALOMON		-3.66
Arithmetic Average of 25 Pools		103.9%	12.90%	Arithmetic Average of 25 Pools		5.2%	10.38%

*All pools included in this analysis had an equity component of at least 35%.

Table 29

Pools with the Highest and Lowest Bond Turnover Percentage* for the One-Year Period Ending June 30, 1980, Ranked According to Average Total Return

Highest Turnover				Lowest Turnover			
Rank	Code Name	1980 Turnover Percent	1980 Average Total Return	Rank	Code Name	1980 Turnover Percent	1980 Average Total Return
1	COM-FDEQ		22.78%	1	COM-BDEQ		22.78%
2	SP-IND		18.35	2	SP-IND		18.35
3	C29	95.0%	18.10 3	3	SP500		17.13
4	C25	91.4	18.09	4	E42	0.0	16.42
5	E38	135.0	18.08	5	C57	1.0	16.17
6	SP500		17.13	6	E79	0.0	15.24
7	E81	139.0	16.35	7	E70	0.0	13.89
8	C22	73.5	14.03	8	C51	0.0	12.98
9	C82	45.0	13.81	9	C44	0.0	12.65
10	C18	76.0	13.49	10	C95	0.0	12.38
11	E92	178.8	13.13	11	C41	0.0	12.27
12	C7	174.0	13.05	12	E6	0.0	11.52
13	E27	180.4	13.01	13	C1	0.0	11.44
14	E96	74.9	12.95	14	E75	0.0	10.71
15	C2	51.0	12.87	15	C88	0.0	10.50
16	C17	103.9	11.93	16	D-JONES		9.45
17	C67	47.1	10.34	17	C16	1.2	9.34
18	E47	171.0	9.98	18	E44	0.0	9.19
19	E31	58.0	9.85	19	C50	0.0	8.93
20	D-JONES		9.45	20	C36	0.7	8.66
21	C26	69.5	9.35	21	C59	0.0	7.82
22	E55	109.0	9.24	22	C20	0.0	7.60
23	E64	217.0	8.87	23	C38	0.0	6.38
24	C46	89.5	8.39	24	C61	1.1	5.63
25	C76	94.7	8.12	25	C47	0.0	4.98
26	E73	103.7	7.08	26	C90	0.0	3.02
27	E69	47.6	4.49	27	C33	0.0	2.23
28	C89	41.5	3.49	28	E87	0.0	1.78
29	E13	50.0	2.49	29	COM-FDBD		0.30
30	COM-FDBD		0.30	30	E88	0.0	-1.51
31	LEH-KUHN		-2.16	31	LEH-KUHN		-2.16
32	SALOMON		-3.66	32	SALOMON		-3.66
Arithmetic Average of 25 Pools		100.7%	11.22%	Arithmetic Average of 25 Pools		0.2%	9.21%

*All pools included in this analysis had a bond component of at least 20%.

INVESTMENT ADVISORY FEES AND DISCRETION

Investment Fees

The median fee for 158 responding institutions was .25% and the average fee was .28%. (This represents 95% of the 166 pools which use outside advisors; 32 pools are managed internally.) For those managers who do not have discretion, economies of scale do seem to come into play as there is differentiation among the largest, middle-sized, and smallest pools. This relationship did not hold true for institutions which did give their managers discretion, as only the smallest pools under $10 million in size seem to "pay up" for management. The close relationship between the over $50 million group and the $10-$50 million group may be the result of the fact that many larger pools are being switched to multiple management.

Investment Discretion

Of 158 institutions, 15% indicated that they do not give their advisor discretion, and 85% indicated that they do give discretion. It seems that more institutions are granting discretion, as last year the figures reported were 23% and 77%, respectively. The largest institutions are more likely to give their managers discretion. The results in Table 30 are consistent with those of prior studies in that those institutions which do not give discretion pay less than those which do.

Table 30

Advisory Fees Paid in 1979-80 as a Percent of Average Market Value, in Terms of Investment Discretion

	Number of Institutions	Arithmetic Average	Median Response
Give Discretion			
Over $50 million	38	.23	.24
$10 to $50 million	57	.30	.25
Under $10 million	38	.33	.34
Subtotal	133	.29	.26
Do Not Give Discretion			
Over $50 million	3	.21	.12
$10 to $50 million	16	.20	.21
Under $10 million	6	.32	.28
Subtotal	25	.23	.22
TOTAL	158	.28	.25

SECTION II -- ENDOWMENT CHARACTERISTICS

INTRODUCTION

As part of the ongoing Comparative Performance Study, NACUBO has built a data base of information concerning endowment funds and characteristics. Section II of this report includes information concerning endowment gift giving, endowment wealth, endowment principal and income, custodial fees, option writing, and the like.

GENERAL INFORMATION

Of the 176 institutions responding, 146 (83%) have fiscal years ending June 30; the next most frequent responses were the last days of May and August with 14 and 10, respectively. Only 3 used December 31, and the remaining 3 pools had varying dates throughout the year.

Endowment Distribution of Participants

The distribution of the 176 institutions reporting endowment size, exclusive of life income and similar funds, as of June 30, 1980, is categorized by independent and publicly-supported institutions in Table 31.

Table 31

Endowment Size Distribution of 176 Independent and Public Institutions

	Independent	Public	Total	Percent of 176 Answering
Greater than $100 million	31	5	35	20%
$50 to $100 million	21	3	24	14
$25 to $50 million	26	5	31	18
$10 to $25 million	34	12	46	26
$5 to $10 million	15	3	18	10
Under $5 million	9	12	21	12
TOTAL	136	40	176	100%

It is interesting to note that the distribution by asset size of those reporting in the 1980 survey is markedly different from that of the 1974 survey as shown in Table 32. In the 1974 through 1980 surveys, the percentage of small institutions participating (those with market values under $10 million in size at the end of each fiscal year) declined from 43% to 22%. At the same time the number of institutions with larger endowments (those over $50 million) has increased from 22% to 34%.

Table 32

Endowment Size Percent Distribution of the 1974 through 1980 Surveys

	1974	1975	1976	1977	1978	1979	1980
Greater than $50 million	22%	24%	29%	32%	33%	34%	34%
$10 to $50 million	35	36	42	41	42	46	44
Under $10 million	43	40	29	27	25	20	22
TOTAL	100%	100%	100%	100%	100%	100%	100%
Number Participating	145	147	138	148	144	147	176

Life Income Funds

Life income funds are those the income of which does not flow through to the institution during the lifetime of the donor or beneficiary, yet the principal of which has been designated as a remainder to the institution.

In Table 3, page 3 of Section I of this report, the dollar amount of life income funds for each institution reporting such information is indicated. The total market value at June 30, 1980, of life income funds of the 130 responding that they had such funds was $539 million. The 1978 survey indicated that there seemed to be major practical differences among institutions in regard to both life income fund investing and financial statement reporting. Of those institutions indicating that they had such funds, about one-third combined these funds with their endowment for investment purposes and about one-half for financial reporting purposes.

To the extent that institutions for financial report purposes include life income funds with endowment funds, wealth probably is being overstated since such assets are not currently earning revenue for the support of the institution.

Non-Security Assets

One hundred and sixteen institutions reported the portion of their total endowment invested in non-security assets. The composition of such assets varies among institutions, but typically this segment of the endowment contains employee mortages which may be at "incentive rates" related to employment, and plant and facilities assets. The earnings from such assets are not typical, however, since they usually are set by the administration or the institution's trustees. In such instances, the return would constitute interest in the case of employee mortgages, room rent in the case of dormitories, transfer charges in the case of heating facilities, etc. The point to be made in regard to financial implications is that an institution with a heavy endowment commitment in non-security assets probably is less flexible in terms of its investment alternatives.

Where non-security assets represent a large portion of the total endowment, "true wealth" may be overstated. In terms of non-security assets, there does not seem to be much difference among the larger endowment size groupings or between independent and public institutions. Middle-sized institutions tend to have more endowment non-security asset representation than both the over $50 million group and the under $10 million group. Table 33 shows the range of responses as of June 30, 1980.

Table 33

June 30, 1980
Non-Security Assets Percentage of Total Endowment*

Non-Security Assets As A Percentage of Endowment	Over $50 Million	$10-$50 Million	Under $10 Million	Independent Institutions	Public Institutions	All Institutions
Less than 1%	9	11	3	17	6	23
1 to 2%	5	7	0	12	0	12
2 to 2.5%	1	2	1	4	0	4
2.5 to 3%	4	1	3	7	1	8
3 to 3.5%	2	1	1	3	1	4
3.5 to 5%	5	4	1	8	2	10
5 to 6.5%	5	5	1	9	2	11
6.5 to 8%	4	4	1	7	2	9
8 to 10%	3	2	1	6	0	6
10 to 12.5%	3	5	1	8	1	9
12.5 to 15%	3	2	0	3	2	5
15 to 20%	1	3	2	5	1	6
20 to 25%	1	1	0	2	0	2
Greater than 25%	0	6	1	6	1	7
TOTAL	46	54	16	97	19	116
Median Response	4.3%	5.8%	3.9%	4.3%	4.9%	4.3%

*Including life income funds.

Non-Controllable Assets

Seventy-eight institutions indicated they had non-controllable assets as shown in Table 34. Of those reporting non-controllable assets, public institutions and those under $10 million had the greatest amount of non-controllable assets.

Table 34

June 30, 1980
Non-Controllable Assets Percentage of Total Endowment*

Percentage of Endowment	Over $50 Million	$10-$50 Million	Under $10 Million	Independent Institutions	Public Institutions	All Institutions
Less than 1%	13	11	2	23	3	24
1 to 2%	5	6	1	10	2	12
2 to 2.5%	1	0	1	2	0	2
2.5 to 3%	2	1	1	4	0	4
3 to 3.5	2	0	0	2	0	2
3.5 to 5%	2	3	0	5	0	5
5 to 6.5	1	5	3	6	3	9
6.5 to 8%	2	1	0	3	0	3
8 to 10%	0	1	0	1	0	1
10 to 12.5%	2	1	1	4	0	4
12.5 to 15%	0	0	0	0	0	0
15 to 20%	2	1	0	3	0	3
20 to 25%	0	3	1	4	0	4
Greater than 25%	0	2	1	1	2	3
TOTAL	32	35	11	68	10	78
Median Response	1.7%	2.7%	5.5%	2.3%	5.5%	2.3%

*Including life income funds.

GROWTH IN ENDOWMENT

Endowment Growth and Real Growth

The increased size of endowment funds in 1980 appears to be the result of new gifts added to endowment, and of appreciation in equity securities offsetting depreciation in the bond security markets. An approximation of endowment growth can be made for the seven-year period ending June 30, 1980. As a group, endowments funds at June 30, 1980, have increased about 23% since June 30, 1973, the first year NACUBO began to gather these data. However, in real terms, taking inflation into account, endowment funds have actually declined in purchasing power based on the Consumer Price Index (CPI) about 4% for the one-year period ending June 30, 1980, and about 34% since June 30, 1973. To help put this into perspective, Table 35 compares the S&P 500 Index, the Dow-Jones Industrial Average, the Salomon Brothers High-Grade Bond Index, and endowment funds both before and after inflation. The endowment fund figures are adjusted by both the CPI and the Higher Education Price Index (HEPI).

Table 35

Five-Year Appreciation Comparison of Indices
Endowment before and after Inflation*

	Fiscal Year Ending June 30								
	1973	1974	1975	1976	1977	1978	1979	1980	7-Year Percent Change
Dow-Jones	891.71	802.41	878.99	1002.78	916.30	818.95	841.98	867.92	-2.67%
S&P 500	104.26	86.00	95.19	104.28	100.48	95.53	102.91	114.24	9.57
Salomon Brothers	93.70	80.53	85.26	86.82	92.43	84.64	83.15	73.23	-21.85
Endowment Funds	100.00	83.30	91.05	98.52	102.36	103.79	112.09	122.85	22.85
Real Endowment Based On CPI*	100.00	76.49	75.19	75.96	74.60	70.82	68.94	66.11	-33.89
Real Endowment Based On HEPI*	100.00	77.48	78.28	79.46	77.52	73.67	73.80	73.60	-26.40

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*CPI (Consumer Price Index) and HEPI (Higher Education Price Index) figures obtained from The National Institute of Education, Higher Education Prices and Price Indexes 19   Supplement, by D. Kent Halstead, and Chronicle of Higher Education, September 24, 1979, and Business Officer, October, 1980.

The table shows that the rebound from the low 1974 bond and equity markets leaves educational institutions far from whole, that is, $100 of endowment at June 30, 1973, would have the purchasing power of only about $73.60 at June 30, 1980, of only about $66.11 based on the CPI and $73.60 based on the HEPI. Stated another way, endowment would have to rise an additional 50% and 35%, respectively, depending upon which index was considered more representative, to maintain 1973 purchasing power in 1980. (Table 36 compares the 2 indices for the past ten years.) This devastating loss in purchasing power is being felt throughout the college and university world and helps explain some of the more recent fiscal problems being experienced by many endowed institutions, especially those that rely more heavily on their endowment to meet current operating expenses. It is not surprising that many institutions have recently undertaken major fund drives to restore the purchasing power of their endowments.

Table 36

Year-to-Year Percent Change In The CPI and HEPI

Fiscal Year	CPI	Year-to-Year Percent Change	HEPI	Year-to-Year Percent Change
1971	100.0	5.2%	100.0	6.4%
1972	103.6	3.6	105.6	5.6
1973	107.7	4.0	111.2	5.3
1974	117.3	8.9	119.1	7.1
1975	130.4	11.2	129.2	8.6
1976	139.6	7.1	137.8	6.6
1977	147.7	5.8	146.7	6.5
1978	157.7	6.8	156.5	6.7
1979	174.9	10.9	168.7	7.8
1980	199.9	14.3	185.4	9.9

Fiscal 1980 Endowment

The 176 institutions reporting in the 1980 survey indicated that their total market value as of June 30, 1980, increased approximately 9.6% in value to $15.1 billion for June 30, 1979-80, fiscal year. This figure included some $538 million in life income fund assets. As shown in Table 37 the increase in asset value or wealth as represented by the median institution was fairly similar for independent and public institutions. Those institutions classified as over $50 million in size had the greatest increase, followed by the $10-$50 million group, and then the under $10 million group. The "wealth" percentage is not a measure of investment performance as it does not take into account withdrawals from, or additions to, endowment. The median yield from endowment, excluding life income funds, was slightly greater for public institutions, and the larger the endowment group the lower the reported yield. This latter observation is consistent with the lower bond mix of endowment pools as the size of the endowment increased, which was noted in Section I of this report.

Table 37

Endowment Size, Wealth, and Average Yield Percent*

	6/30/80 Market Value (In Billions)	6/30/80 Average Endowment (In Millions)	1980 Median Increase (In Wealth)	6/30/80 Median Endowment (In Millions)	Median Average Yield Percent
Over $50 Million	$ 13.042	$ 217.369	11.3%	$ 120.118	6.8%
$10-$50 Million	1.896	24.619	9.1	20.185	7.2
Under $10 Million	191	4.901	6.1	5.113	7.6
Independent	12.758	93.806	9.6	35.339	7.0
Public	2.371	59.282	10.7	14.414	7.4
All Institutions	15.129	85.960	9.6	28.066	7.2

*Endowment market value and wealth figures include life income funds. Yield percentages exclude life income funds.

Gifts to Endowment

Because each college and university and its alumni are unique, it is often difficult to draw analogies relating to gift giving among institutions. It is hoped that from data gathered over longer periods of time, many useful trends will appear. Table 38 shows that the smaller the institution, the greater endowment gifts are as a percent of market value. This gift pattern is contradictory to the growth in endowment wealth reported in the prior table, indicating that the larger the institution the greater the increase in wealth. This could be explained by the fact that in 1980 better endowment investment performance was achieved by the larger endowed institutions, as shown in Table 4 of Section I. This would also seem consistent with the greater stock exposure of larger endowments (Table 17) and the fact that stocks far outperformed bonds in 1980.

As shown in Table 38, gifts to all institutions as a percent of market value for the six years 1975 through 1980 continue to be in a rather tight range of about 1%, from 2.6% in 1974-75 to 3.7% in 1979-80. In each year the gifts to public institutions have represented a larger percent of average market value than those to independent institutions.

Table 38

Fiscal 1976 through 1980 Gifts to Endowment As a Percent of Average Market Value

	1974-75 Median Endowment	1975-76 Median Endowment	1976-77 Median Endowment	1977-78 Median Endowment	1978-79 Median Endowment	1979-80 Median Endowment
Over $50 million	2.0%	3.1%	2.3%	2.4%	2.7%	3.5%
$10 to $50 million	2.3	2.2	3.1	3.4	2.9	3.8
Under $10 million	3.1	5.1	6.7	4.5	6.3	6.1
Independent	2.3	2.4	3.0	2.7	2.7	3.6
Public	3.6	4.7	3.7	4.1	4.6	5.4
All Institutions	2.6%	2.7%	3.1%	3.4%	3.3%	3.7%

Table 39 shows 1979-80 quasi-endowment gifts as a percentage of total endowment gifts. Quasi-endowment gifts are deemed more valuable than restricted gifts as these are gifts over which the institution has the greater discretion. The table shows that independent institutions have more quasi-endowment as a percentage of total endowment than do public institutions, and that the largest institutions have more quasi-endowment than the middle-sized institutions, which in turn have more quasi-endowment than the smallest sized grouping. In 1980 the median institution received only 11.2% in quasi-endowment gifts.

Table 39

Quasi-Endowment

	Total Quasi-Endowment As a Percentage of Total Endowment At June 30, 1980		1979-80 Quasi-Endowment Gifts as a Percentage of Total 1978-79 Gifts	
	Mean Endowment	Median Endowment	Mean Endowment	Median Endowment
Over $50 million	33.5%	30.3%	30.4%	22.8%
$10 to $50 million	26.9	24.0	26.7	19.3
Under $10 million	26.9	22.0	13.7	.8
Independent	30.5	27.0	22.6	12.1
Public	23.7	22.0	31.7	5.1
All Institutions	29.0%	26.0%	24.6%	11.2%

ENDOWMENT SPENDING AND SUPPORT

Current Fund Revenue and Endowment Income

Current fund revenue and endowment income for both independent and public institutions are portrayed in Graphs III and IV. It can be seen from Graph III that six independent and two publicly controlled institutions had current fund revenue of less than $5 million, one public and twenty-three independent institutions had current fund revenue of $5 to $10 million, etc. Graph IV shows, for example, that 3 independent institutions, or 2% (2/121), and 19 public institutions, or 61% (19/31), received income from endowment constituting less than 1% of current fund revenue, etc. The average amount of current fund revenue for independent and public institutions is $54.6 million and $195 million, respectively. The median figures are $16.1 million and $222 million. The average percent of endowment income to current fund revenue for independent and public institutions is 12.4% and 1.8%. The median figures are 8.2% and .5%. This graph depicts the greater importance placed on the endowment of independent institutions in maintaining quality education relative to that of public institutions.

Budget Guideline

Graph V illustrates the amount of endowment spent for current operations as a percentage of the average market value. This percentage is the amount utilized from the endowment after any income is added back to principal and includes any appropriation of endowment principal during the fiscal year to help meet the current budget. In a sense it is a budget "guideline" showing what institutions during fiscal 1979-80 contributed from their total endowment to support their immediate needs. The budget guideline for the average and median institution is 6.8% and 6.4%, respectively.

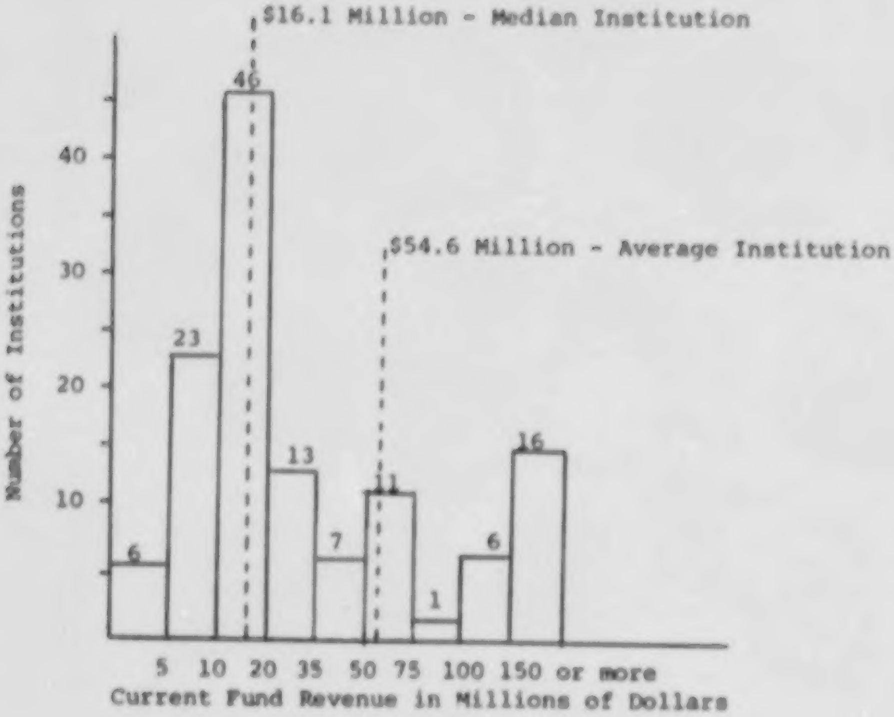
The 1980 median budget guideline shows a .4% increase over 1979, the same increase which occurred the prior year. In 1978 there was an increase over 1977 of .3%, the latter being an increase over 1976 of .28% This appears to be consistent with the shifting of endowments to greater income-producing investments and the increase in endowment principal as discussed earlier. It also seems to indicate that institutions are spending more from endowment to meet expenses in these inflationary times. The 6.4% budget guideline is .6% below the 7.0% average yield for independent institutions. One explanation for this may be that a number of institutions are adding income to principal to compensate for the loss of real endowment as a result of inflation and security market performance. Budget guideline figures are net of life income funds.

Endowment Coverage

Graph VI shows the distribution of 128 independent institutions in terms of their average endowment as of June 30, 1979, and June 30, 1980, divided by current fund expenditures. For example, for four institutions the average market value of the endowment was 7.5 times greater than current fund expenditures. On the other hand, 25 institutions could not cover 50% of their current fund expenditures with their entire endowment. The endowment of the average institution is 2.24 times greater than current fund expenditures. The endowment of the median institution is 1.58 times greater.

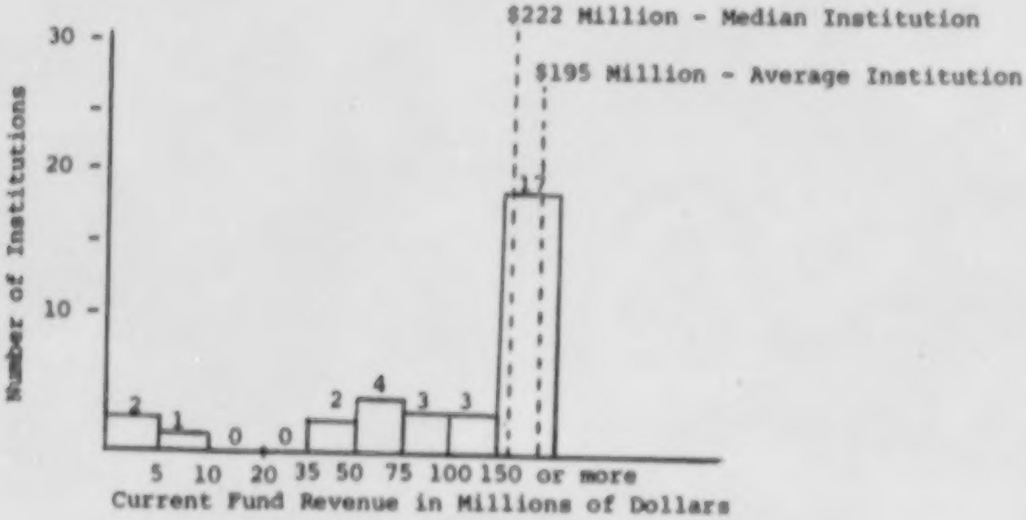
GRAPH III

Current Fund Revenue for 129 Independent Institutions
(1979-80)



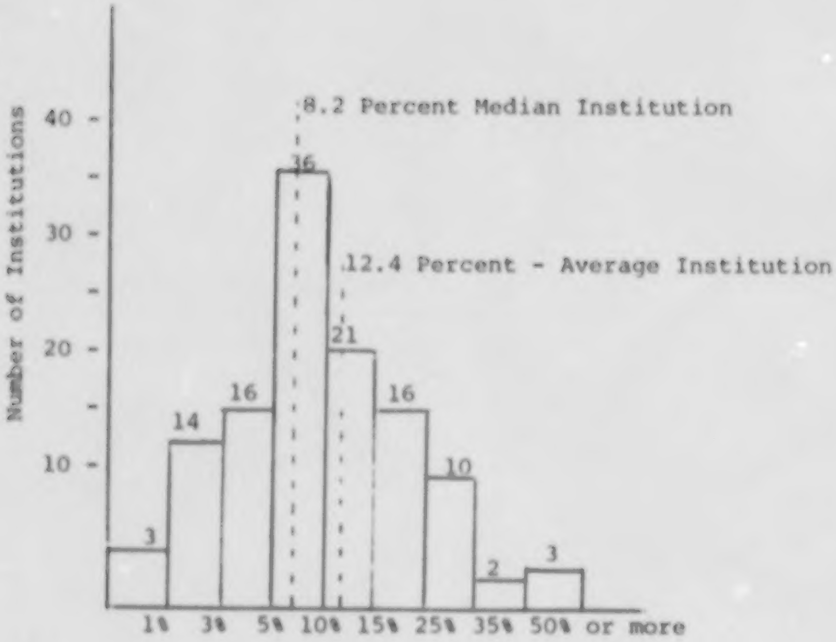
GRAPH III - Public

Current Fund Revenue for 32 Publicly Controlled Institutions
(1979-80)

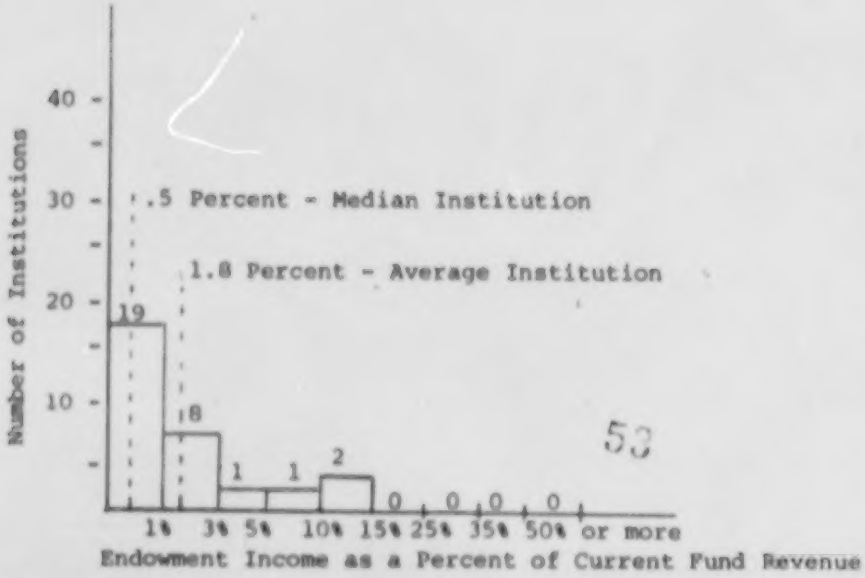


GRAPH IV - Independent

Endowment Income as a Percent of Current Fund Revenue for 121 Independent Institutions (1979-80)

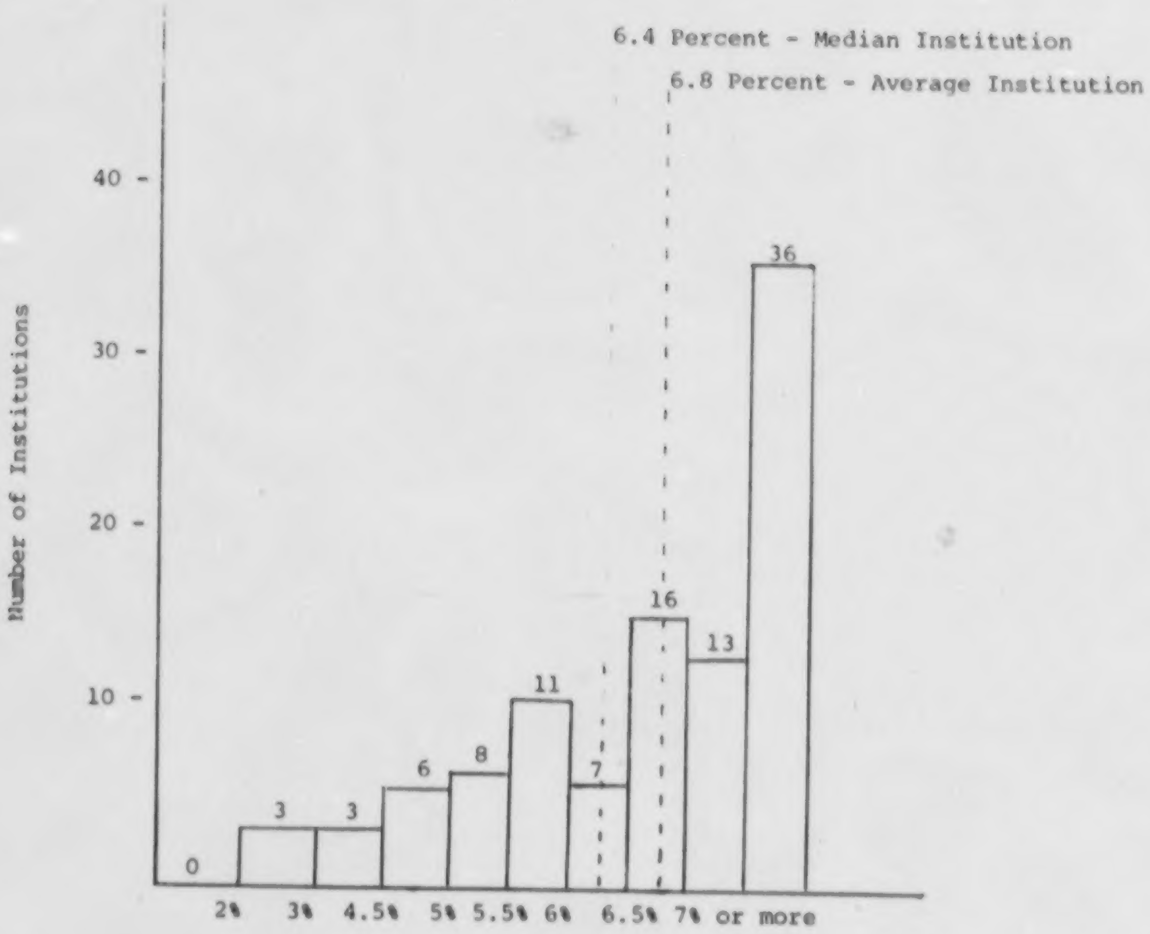


Endowment Income as a Percent of Current Fund Revenue for 31 Publicly Controlled Institutions (1979-80)



GRAPH V

Budget Guideline--Endowment Income Spent as a Percent Of Average Market Value of the Endowment* Of 103 Independent Institutions
(1979-80)

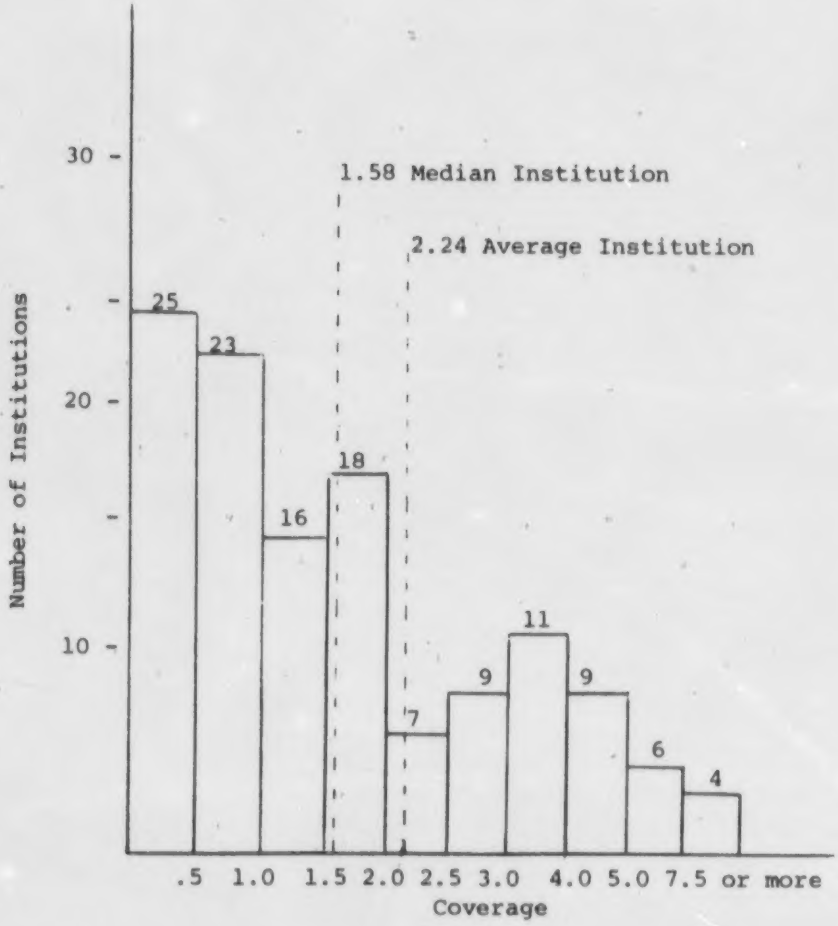


*Excluding life income funds.

GRAPH VI

Endowment* Coverage of Current Fund Expenditures for 128 Independent Institutions

(1979-80)



*Excluding life income funds.

In terms of a liquidity measure one could say that the median institution could exist using its endowment 1.58 years if it did not receive any current fund revenues to meet its current fund expenditures. The statement is far from correct in that if an institution were unable to meet its expenses and had to rely on endowment to do so, only the quasi-endowment component of total endowment would be readily available. The terms of the true endowment component would have to be reviewed carefully to determine its expendability. For purposes of "real liquidity" a separate measure for quasi-endowment only could be used. This 1.58 figure in 1980 compares with 1.64 in 1979 and 1.66 in 1978. It is worth noting that the median response in the 1977 study was 1.83 years and in the 1976 study was 2.01 years. Thus, slight slippage occurred in fiscal 1980 for independent institutions which seems consistent with the reduction in real purchasing power referred to earlier in this report. Endowment wealth increased 9.6%, inflation 14.4%, and investment performance for all endowment pools 11.9%. The 1980 endowment coverage figure excludes life income funds.

Total Return (Yield and Appreciation)

In terms of applying the total return concept (the spending of yield plus a prudent portion of appreciation) to help meet current year expenses, 176 institutions responded as shown in Table 40. Table 40

Adoption of Total Return for Budgeting Purposes

	Number Answering	Percent Answering
Adopted Total Return Concept	51	29%
Abandoned Total Return Concept	13	7
Are Considering Adopting Total Return Concept	11	6
Considered and Rejected Adopting Total Return Concept	51	29
Have Not Considered Adopting Total Return Concept	48	28
Not Answered	2	1
TOTAL	176	100%

Table 40 indicates that 13 institutions abandoned the total return concept. These are listed at the end of Exhibit IV. Two additional institution has adopted total return in the past year. As a practical application the total return concept is becoming less important to many institutions. This conclusion is drawn from the fact that over two-thirds of the institutions applying total return for budgeting purposes and indicating how much appreciation was spent under their formula, indicated that the yield (interest and dividends) under their formula was sufficient in that no appreciation at all was spent.

The responses of the 48 institutions applying total return for budgeting showed that 2 (4%) applied total return to true endowment only, 5 (10%) to quasi-endowment only, and 41 (86%) to both true and quasi-endowment. For the 38 institutions reporting their market valuation and indicating the use of total return for budgeting purposes, 47 were privately-supported institutions and four were state-supported.

Relatively speaking, more heavily endowed institutions have had a greater tendency to apply total return for budgeting purposes. However, a significant number of institutions in all market size categories apply total return, indicating that there does not seem to be a particularly strong correlation between endowment size and the adoption of total return for budgeting purposes, nor does there appear to be a correlation between endowment size and fund application (true, quasi-, or both) in using total return for budgeting. That is, of the five institutions applying total return to quasi-endowment only, the size of the endowment did not fall into any particular range. The same was true for those 41 institutions applying total return to both true and quasi-endowment.

There also appears to be a relationship between institutions applying the total return concept and endowment income as a percentage of current fund revenue. Institutions applying the total return concept for budgeting had endowment which contributed about two times more to current fund revenue than those that did not.

Total Return Spending Formulas

Of the 51 institutions that adopted total return for budgeting purposes, 45 described their method of application (Exhibit IV). An overview of responses shows that about two-thirds of the institutions determine the amount of total return to be drawn from endowment based on a formula whereby a spending percentage is applied to the endowment market value.

Approximately half of these institutions use a three-year market average to determine the base upon which to apply the spending rate, and approximately one-fifth of these institutions use a five-year average. About one-fifth of those reporting have modified their formulas within the last three years. These formula changes are also shown in Exhibit IV.

Endowment Support

Endowment principal and income per full-time equivalent (FTE) student and per faculty member for independent institutions are shown in Tables 41 through 44. No comparable tables have been produced for public institutions because of the general lack of significance placed on their endowments. Endowment support for approximately 70% of the public institutions responding was in the lowest category range for independent institutions, and over 85% of public institutions responding were in the lowest two categories.

Table 41

Independent Institutions - Endowment Principal Per FTE Student (1979-80)

Amount	Number of Institutions
Less than $1,000	3
$1,000 to $5,000	27
$5,000 to $10,000	23
$10,000 to $15,000	17
$15,000 to $20,000	14
$20,000 to $25,000	4
$25,000 to $35,000	19
$35,000 to $50,000	12
$50,000 to $75,000	7
Greater than $75,000	5
TOTAL	131
Average Institution	$21,525
Median Institution	$13,450

Table 42

Independent Institutions - Endowment Income Per FTE Student (1979-80)

Amount	Number of Institutions
Less than $100	8
100 to $200	8
200 to $300	8
300 to $500	13
500 to $750	10
750 to $1,000	15
1,000 to $1,500	12
1,500 to $2,000	7
2,000 to $4,000	17
Greater than $4,000	4
TOTAL	102
Average Institution	$1,175
Median Institution	$ 795

Table 43

Independent Institutions - Endowment Principal Per Faculty Member (1979-80)

Amount	Number of Institutions
Less than $25,000	7
25,000 to $50,000	16
50,000 to $75,000	7
75,000 to $100,000	12
100,000 to $125,000	10
125,000 to $150,000	7
150,000 to $200,000	17
200,000 to $300,000	14
300,000 to $400,000	15
Greater than $400,000	23
TOTAL	128

Average Institution	$232,475
Median Institution	$165,300

Table 44

Independent Institutions - Endowment Income Per Faculty Member (1979-80)

Amount	Number of Institutions
Less than $1,000	4
1,000 to $2,000	6
2,000 to $3,000	6
3,000 to $4,000	5
4,000 to $5,000	6
5,000 to $7,500	15
7,500 to $10,000	6
10,000 to $15,000	21
15,000 to $20,000	11
Greater than $20,000	20
TOTAL	100

Average Institution	$13,075
Median Institution	$10.100

The seven-year record of the average and median responses of independent institutions for endowment principal per FTE student and faculty member is shown in Table 45. The 1980 median figure shows that about 15% increase in principal and income per FTE student over the prior year, but a somewhat less increase per faculty member. This might indicate a declining number of full-time students, or a relative increase of faculty to FTE students.

Table 45

Seven-Year Endowment Record - Principal and Income Per FTE Student and Faculty Member

	Principal per FTE Student		Income per FTE Student	
	Average Response	Median Response	Average Response	Median Response
1980	$21,525	$13,450	$1,175	$795
1979	20,250	11,700	1,125	680
1978	18,250	11,600	1,250	665
1977	17,725	10,000	950	585
1976	18,650	11,750	915	540
1975	15,550	9,400	800	510
1974	14,800	8,200	800	430

	Principal per Faculty Member		Income per Faculty Member	
1980	$232,475	$165,300	$13,075	$10,100
1979	224,350	156,800	12,825	9,050
1978	200,100	136,500	11,575	7,750
1977	189,000	135,000	10,200	6,800
1976	192,000	138,000	11,000	7,050
1975	162,000	118,000	8,700	6,250
1974	148,000	100,000	8,100	5,100

INVESTMENT MANAGEMENT AND CUSTODY MATTERS

Investment Management

Thirty-one institutions indicated that they manage at least 80% of their endowments internally. Exhibit V lists these along with the institutions which use outside management and their respective advisors. The exhibit indicates whether the outside manager is retained for stock (S) or bond (B) management or both (S,B). Eighty-six institutions indicated that they have more than 1 advisor. Seventy-nine of these institutions indicated they had more than 1 stock manager and 64 had more than 1 bond manager. The foregoing does not include the institutions which use The Common Fund for Non-Profit Organizations as an investment advisor for stocks, bonds, or cash. The 31 internally managed institutions are fairly well distributed among the various size investment pool categories shown in Table 46, with the greatest concentration among the largest pools.

Table 46

Internal Investment Management

Investment Pool Size	Number in Each Group	Percent of Total
Over $100 million	11	36%
$50 to $100 million	5	16
$25 to $50 million	6	19
$10 to $25 million	3	10
5 to $10 million	2	6
Under $5 million	4	13
TOTAL	31	100%

Custodial Arrangements

Eight institutions indicated that they serve as their own custodian for at least 80% of their assets. These institutions are shown in Exhibit IV as are the institutions which use outside custodians and the respective financial institution retained. Of the 155 indicating they use outside custodians, 71 use more than one custodian.

Custodial Fees

About two dozen institutions indicated that their custodian is also their investment advisor and that it was not possible to identify separately the cost for each service. Excluding these institutions and the eight institutions which do not use outside custodians, of the 119 institutions provided information on custody fees. These fees excluded any custody costs relating to security lending, option writing, or investment management.

It is difficult to find an accurate measure to compare institutional custody fees. This is because many special arrangements have developed between institutions and their custodians. For example, from the 1975 survey it is known that institutions with longer custodial relations tend to pay less. Custodial fees will also vary because of the different number of security positions and shares, etc. The foregoing should be taken into consideration when reviewing custodial fees which are compared based on fees paid as a percent of assets under custody.

Table 47 shows that the average institution pays .062% of the market value of assets under custody. Six institutions pay less than .01%, 11 others pay .01 and .02%, etc. There appears to be a realization of economies of scale as institutions over $50 million pay .030%, institutions between $10 to $50 million pay .066%, and institutions under $10 million pay .281%.

Table 47

Custodial Fees as a Percent of Assets under Custody

	Under $10 Million	$10 to $50 Million	Over $50 Million	All Institutions
Under .01%	0	3	3	6
.01 to .02%	1	6	4	11
.02 to .03%	0	1	15	16
.03 to .04%	0	2	9	11
.04 to .05%	0	2	4	6
.05 to .06%	0	9	0	9
.06 to .07%	0	5	2	7
.07 to .08%	1	3	3	7
.08 to .09%	0	1	1	2
.09 to .10%	0	2	0	2
.10 to .12.5%	1	7	2	10
.12.5 to .15%	3	2	1	6
.15 to .17.5%	0	2	0	2
.17.5 to .20%	0	4	0	4
Over .20%	15	5	0	20
TOTAL	21	54	44	119
Median Responses	.281%	.066%	.030%	.062%

INVESTMENT PRACTICE AND POLICY

Option Writing

Thirty institutions reported they are participating in option writing, seven more than reported participation in 1978, the last time the subject was included in a NACUBO survey. Thirteen reported they began writing and stopped, and 29 presently have this matter under consideration. In 1978 these figures were 6 and 9, respectively. Of those which started and stopped, 3 began in 1974 and stopped in 1977, 5 began in 1975 - 4 stopping in 1976 and 1 in 1977, 1 began in 1976 and stopped in 1978, 2 started in 1977 - 1 stopping in 1978 and 1 stopping in 1979, 1 started and stopped in 1978, and 1 started in 1978 and stopped in 1980. Of the remaining institutions, about half considered writing options and rejected the idea and about half did not consider writing options. The market size distribution of those utilizing options is shown in Table 48.

Table 48

Size of Institutions
Participating in Stock Option Writing at June 30, 1980

Endowment Size	Number Participating	Percent Participating
Over $100 Million	10	34%
$50 to $100 Million	9	30
$25 to $50 Million	3	10
$10 to $25 Million	3	10
$5 to $10 Million	4	13
Under $5 Million	1	3
TOTAL	30	100%

Fourteen institutions have pilot option writing programs on a fully "covered" basis. Thirteen other institutions write options on their mainstream endowment holdings. Two have polot programs and write options on their mainstream holdings, and 1 places 90% of its pilot program money in Treasury Bills and buys options with the remaining 10%. A number are considering utilizing the "put" market as well. The 30 institutions also place various parameters on their approach to the options market, some of which are as follows:

- Write covered options on stocks already in their portfolio.
- Write covered options on up to a specific percent of their portfolio (i.e., 5, 10, or 20%).
- Write covered options on up to a specific percent of their total portfolio (i.e., 2.5, 3, 5, 10, or 20%).
- Write covered options on up to a specific dollar amount (i.e., $1.25, $2.5, $3, or $6 million).
- Write options on securities we would consider selling anyway.
- Write options on up to half of internally managed holdings, on a maximum of 20 different securities.
- Write options on up to 25 percent of an existing position.
- Segregate $1 million in cash to buy stocks and write options on issues on manager's approved list. No holding can be greater than $150,000.
- Options must be repurchased, securities cannot be called.

About two-thirds of the institutions participating in the option market have been doing so for at least three years as shown in Table 49.

Table 49

Year Institution Started Writing Options

Year	Number	Cumulative
1974	1	1
1975	3	4
1976	8	12
1977	7	19
1978	1	20
1979	5	25
1980	5	30

Futures Market

Six institutions indicated that they use "financial futures" as a tool in managing the fixed-income portion of this portfolio. One institution also indicated it invested in gold and currency futures.

Investment in Gold

Only four institutions indicated they invest in gold stocks. Six others invest in companies with significant exposure to gold that might be considered a gold play. No institution invested in gold coins, although two stated they have chosen to retain, as an investment, gold and other coins received as part of a collection from donors. One institution invests in gold futures.

Investment Policy Statement

One hundred and twenty-eight institutions, almost 75% of the 176 reporting, indicated they have a written statement of investment objectives.

Foreign Investments

Of the 156 institutions responding, 86 or 55%, indicated they permit investment in foreign securities. Another 20, or 13%, allow such investments by exception. Fifty, or 32%, do not permit such investments.

South African Investments

Eighty-eight of the 151 institutions responding, or 58%, indicated they do not have a specific policy relating to U.S. companies that are doing business in the Republic of South Africa or a policy affecting the direct investment in South African companies. Sixty-three, or 42%, responded that they do have such a policy, but their statements are too lengthy to report in this survey.

EXHIBIT I

1980 NACUBO COMPARATIVE PERFORMANCE STUDY

173 PARTICIPATING INSTITUTIONS (REPRESENTING 198 POOLS)

Academy of the New Church
Agnes Scott College
Albion College
Alfred University
Allegheny College
Alma College
American University
Amherst College
Arizona State University
Baldwin-Wallace College
Baylor College of Medicine
Berea College
Berry College
Boston University
Bowdoin College
Brandeis University
Brown University
Bryn Mawr College
Bucknell University
California Institute of Technology
Carleton College
Carnegie-Mellon University
Carroll College
Case Western Reserve University
Claremont Men's College
Clark University
Clarkson College of Technology
Colby College
Colgate University
College of Wooster
Colorado College
Columbia University
Columbia University, Teachers College
Connecticut College
Cooper Union
Cornell College
Cornell University
Dartmouth College
Davidson College
Denison University
Dickinson College
Doane College
Drake University
Drew University
Duke University
Earlham College
Eastern Michigan State University
Emory University
Franklin and Marshall College
Furman University
George Washington University
Georgetown University
Grinnell College
Hamilton College
Hampton Institute
Harvard University
Haverford College
Hendrix College
Hobart and William Smith Colleges
Hollins College
Hope College
Indiana University
Johns Hopkins University
Kalamazoo College
Kenyon College
Lafayette College
Lawrence University
Lehigh University
Loyola University of Chicago
McGill University
Marquette University
Massachusetts Institute of Technology
Medical College of Pennsylvania
Mercer University
Michigan State University
Middlebury College
Mills College
Monmouth College
Mount Holyoke College
Muhlenberg College
Newberry College
New York University
Northwestern University
Oakland University
Oberlin College
Occidental College
Ohio State University
Ohio University
Ohio Wesleyan University
Oregon State Board of Higher Education
Oregon State University Foundation
Pennsylvania State University
Philadelphia College of Textiles
Pomona College
Pratt Institute
Princeton University
Reed College
Rensselaer Polytechnic Institute
Rhode Island School of Design
Rice University

Rochester Institute of Technology
Rockefeller University
Rutgers, The State University of New Jersey
St. Norbert College
Simmons College
Smith College
Southern Methodist University
Spelman College
Stanford University
State University of New York at Binghamton
State University of New York at Buffalo
Stephens College
Swarthmore College
Sweet Briar College
Syracuse University
Temple University
Thomas Jefferson University
Trinity College (Conn.)
Trinity College (D.C.)
University of Akron
University of Alabama System
University of Arizona
University of Arkansas
University of Chicago
University of Cincinnati
University of Connecticut
University of Dayton
University of Delaware
University of Denver
University of Evansville
University of Illinois
University of Maine
University of Maryland
University of Miami
University of Michigan
University of Minnesota
University of Mississippi
University of Missouri
University of Nebraska
University of Nevada System
University of Notre Dame
University of Oregon Foundation
University of Pennsylvania
University of Pittsburgh
University of Puget Sound
University of Richmond
University of Santa Clara
University of Southern California
University of Tampa
University of Tennessee
University of Texas
University of Tulsa
University of Vermont
University of Virginia
University of Wisconsin Foundation
University of Wisconsin System
Vanderbilt University
Vassar College
Virginia Military Institute
Wake Forest University
Washburn College
Washington State University
Washington University
Wellesley College
Wells College
Wesleyan University
Western Michigan University Foundation
Westmar College
Wheaton College
Whitman College
Willamette University
Williams College
Worcester Polytechnic Institute
Yale University

EXHIBIT II

1980 COMPARATIVE PERFORMANCE STUDY

CHARACTERISTICS OF PARTICIPATING INVESTMENT POOLS

Pool Characteristics:

1) This is an official pooled investment fund.
2) This is a separately invested fund which was unitized to enable performance to be accurately measured.
3) This is a combination of more than one separately invested unitized fund.
4) This is a pool consisting of only those assets over which management has direction.
5) This is an official pooled life income fund.

Pool Composition:

1) All invested funds, endowment, quasi-endowment, and funds invested for plant or other purposes but temporarily invested in the pool.
2) Endowment and quasi-endowment.
3) Endowment only.
4) Quasi-endowment only.

Investment Objectives:

1) Total Return - Investment returns are sought from both market appreciation and dividends and interest; current income requirements generally do not dictate the kind of securities that may be held, as primary emphasis is on long-term overall return.
2) Balanced - The pooled funds are invested in such a manner as to minimize investment risks without unduly sacrificing current income or the possibility for some long-term growth. This is usually done by investing a portion of the pool in fixed income securities.
3) Income Orientated - Investment policy is dictated by current income needs; market appreciation is never utilized for current operating purposes, and primary emphasis is on current income maximization.

Market Value:

A. Over $100 Million.
B. $50 to $100 Million.
C. $25 to $50 Million.
D. $10 to $25 Million.
E. $5 to $10 Million.
F. Under $5 Million.

1980 NACUBO COMPARATIVE PERFORMANCE STUDY
CHARACTERSTICS OF PARTICIPATING INVESTMENT POOLS

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1980	% Bonds 1980	% Stocks 1980	% Real Estate 1980	% Miscel-laneous Assets 1980	Non-Controllable Assets 1980	6/30/80 # Bonds	6/30/80 # Stocks	1980 Bond Turn-Over %	1980 Stock Turn-Over %
1	E1	1	2	3	B	15	22	59	2	2	4	11	107	N/A	N/A
2	E2	1	3	2	D	9	30	59	0	2	2	28	37	31.2	19
3	E3	1	2	1	D	4	19	78	0	0	0	18	50	31.6	8.9
4	E4	1	2	1	D	17	14	58	11	0	0	16	48	195	138
5	E5	1	1	1	B	2	13	82	2	2	2	22	133	5	19
6	E6	1	2	2	B	13	20	61	0.1	6	6	18	36	0	11.6
7	E7	1	2	1	E	63	20	17	0	0	0	11	11	N/A	N/A
8	E8	1	2	1	A	31	12	52	0	5	5	30	100	N/A	N/A
9	E9	1	3	1	E	82	0	18	0	0	1	N/A	N/A	N/A	N/A
10	E10	1	2	1	D	21	18	61	0	0	0	16	48	195	138
11	E11	1	1	1	A	11	14	74	0	0	0	98	166	88.1	27.9
12	E12	5	2	2	F	55	27	18	0	0	0	6	22	1.6	13
13	E13	1	2	3	E	22	40	35	0	3	1	N/A	N/A	50	95
14	E14	1	2	2	D	1	21	66	0	12	12	26	40	26	6
15	E15	1	2	2	C	2	21	58	13.6	5	0	22	59	14	20
16	E16	1	2	1	D	5	23	69	1.5	5	0	26	44	N/A	N/A
17	E17	1	2	2	B	13	31	52	0	4	4	35	42	35.2	19.2
18	E18	4	1	1	A	13	16	70	0	1	0	70	42	20.6	1.2
19	E19	1	1	1	B	15	9	75	0	1	3	6	122	4.9	28
20	E20	1	2	1	C	15	25	59	1	0	0	29	75	12	52
21	E21	1	2	2	A	0	26	74	0	0	2	30	65	N/A	N/A
22	E22	1	3	3	D	9	53	38	0	0	1	65	42	N/A	5.8
23	E23	1	2	3	F	16	43	41	0	0	0	5	33	5.7	60.6
24	E24	1	2	1	D	31	19	50	0	0	0	11	50	23	80.1
25	E25	3	2	1	D	7	5	88	0	0	5	14	86	N/A	N/A
26	E26	1	2	2	D	6	19	74	0	1	0	15	62	147.1	8.3
27	E27	1	2	1	B	10	22	67	0	2	1	22	356	180.4	44.5
28	E28	1	2	2	A	N/a	n/a	N/a	n/a	n/a	1	N/A	N/A	N/A	N/A
29	E29	1	2	1	A	6	33	59	0	2	0	39	64	2	53
30	E30	2	1	2	B	11	28	60	0.1	1	1	34	53	N/A	N/A
31	E31	1	3	1	A	7	35	53	5	0	8	96	149	58	18
32	E32	1	2	2	C	21	31	48	0	0	0	69	57	N/A	10.3
33	E33	4	2	1	A	0	26	74	0	0	0	48	148	26.4	38.1
34	E34	1	2	2	A	5	4	74	14.8	3	17	10	166	2.8	40

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1980	% Bonds 1980	% Stocks 1980	% Real Estate 1980	% Miscel-laneous Assets 1980	Non-Control-lable Assets 1980	6/30/80 # Bonds	6/30/80 # Stocks	1980 Bond Turn-Over %	1980 Stock Turn-Over %
35	E35	1	2	3	B	14	30	56	0	0	1	31	78	15.5	20.7
36	E36	4	1	1	B	31	8	61	0	0	0	25	125	95	68
37	E37	1	2	2	C	6	29	58	0	7	4	60	124	1.7	28.2
38	E38	1	2	2	A	5	23	71	0.2	1	2	43	78	135	32
39	E39	1	2	1	E	7	56	38	0	0	0	21	28	14	18
40	E40	1	2	1	A	3	21	68	6	2	8	31	439	N/A	N/A
41	E41	1	2	3	E	11	65	24	0	0	1	28	45	24	44
42	E42	2	2	1	C	15	24	61	0	0	0	9	58	0	17.9
43	E43	3	2	2	C	7	18	71	0	4	1	14	66	2.8	27.4
44	E44	1	3	2	F	27	22	51	0	0	0	7	31	0	3
45	E45	1	2	1	A	7	19	73	0	2	2	53	33	34.5	36.4
46	E46	1	2	2	A	5	18	77	0	0	15	63	77	15	7.2
47	E47	1	2	1	B	13	33	52	0.8	1	1	28	57	171	110
48	E48	4	2	2	F	0	54	46	0	0	1	28	22	38.1	8.7
49	E49	1	2	1	C	5	22	73	0.	0	0	43	81	N/A	N/A
50	E50	4	2	1	C	11	38	50	0	1	1	7	20	27.7	17.4
51	E51	1	2	1	C	37	13	41	10	0	10	5	23	N/A	N/A
52	E52	1	1	2	D	10	17	62	1	10	11	9	61	2.1	40.3
53	E53	1	2	2	C	13	16	68	0	3	4	34	87	N/A	N/A
54	E54	1	2	1	C	4	23	73	0	0	0	29	77	35	20
55	E55	1	2	1	C	5	29	64	0	2	12	25	87	109	32
56	E56	1	2	2	B	12	30	56	1	1	0	51	105	19.1	72
57	E57	1	1	2	A	5	30	66	0	0	1	234	141	34.5	24.9
58	E58	4	3	3	F	12	82	6	0	0	0	8	1	N/A	N/A
59	E59	1	2	2	D	21	28	51	0	0	0	10	25	10	26
60	E60	1	2	2	E	2	22	75	0	1	7	18	37	15	23
61	E61	1	2	2	A	6	5	59	0	30	1	11	140	N/A	N/A
62	E62	1	2	2	E	2	33	65	0	0	0	18	48	5.9	34.3
63	E63	1	2	1	A	10	20	70	0	0	0	7	177	N/A	122
64	E64	1	2	1	E	21	30	47	0	3	0	18	51	217	131
65	E65	1	2	1	C	5	52	42	0.6	0	1	132	75	24.1	65.2
66	E66	1	1	1	C	3	30	67	0	0	9	18	44	15.6	19.3
67	E67	1	2	2	C	6	24	70	0	0	1	29	70	1.8	19.3
68	E68	3	1	1	C	23	26	57	0	0	2	21	90	33.6	31.9
69	E69	1	2	1	B	12	30	54	0	3	1	31	41	47.6	22.8
70	E70	1	1	2	D	4	39	54	0	3	1	N/A	87	0	89
71	E71	1	2	1	C	21	24	55	0	0	0	N/A	N/A	N/A	N/A
72	E72	1	1	2	B	11	28	54	1.2	6	7	N/A	N/A	N/A	N/A
73	E73	3	2	2	A	12	35	47	0	7	7	68	188	103.7	26.4
74	E74	1	1	2	E	10	33	57	0	0	0	74	52	20.9	8.5

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1980	% Bonds 1980	% Stocks 1980	% Real Estate 1980	% Miscellaneous Assets 1980	Non-Controllable Assets 1980	6/30/80 # Bonds	6/30/80 # Stocks	1980 Bond Turn-Over %	1980 Stock Turn-Over %
75	E75	1	1	1	C	5	25	70	0	0	0	64	61	0	0.1
76	E76	1	2	2	F	7	33	60	0	0	0	14	46	19	24.3
77	E77	5	2	2	E	10	42	49	0	0	0	19	42	21.3	9.3
78	E78	1	2	2	D	41	32	27	0	0	0	27	41	8.1	74.9
79	E79	2	2	2	D	10	22	68	0	0	0	29	37	0	11.7
80	E80	3	2	3	C	34	36	28	1	1	1	58	45	12	25
81	E81	1	2	1	D	6	30	57	3.5	4	4	28	121	139	26
82	E82	1	1	2	F	20	44	36	0	0	0	19	15	N/A	N/A
83	E83	1	1	2	F	16	39	45	0	0	0	15	18	N/A	N/A
84	E84	1	3	2	F	2	37	61	0	1	1	11	47	17.7	47
85	E85	2	2	2	C	22	24	44	9	1	9	31	63	32.8	28.6
86	E86	3	2	1	D	41	7	52	0	0	0	30	33	10.4	63.7
87	E87	5	2	3	F	9	88	3	0	0	0	6	1	0	0
88	E88	5	2	3	F	10	90	0	0	0	0	12	0	0	0
89	E89	1	1	2	B	11	7	29	41.2	13	54	16	89	26	59
90	E90	4	1	2	A	12	36	43	0	8	0	51	40	N/A	N/A
91	E91	1	3	2	E	22	38	41	0	0	9	14	35	40	14.7
92	E92	5	2	2	F	13	31	56	0	0	0	17	31	178.8	21.5
93	E93	1	4	1	B	21	4	63	6	7	1	5	70	0	14.6
94	E94	1	2	2	D	7	13	80	0	0	0	6	41	1.5	4.3
95	E95	2	2	1	D	6	20	38	3.7	32	34	28	51	11	10.4
96	E96	1	3	1	B	21	33	45	n/a	n/a	1	52	66	74.9	16.7
97	E97	3	3	3	E	11	33	56	0	0	0	43	35	11	31
98	E98	1	1	1	C	25	22	46	3.7	3	1	48	52	37.2	19.4
99	E99	3	2	1	D	3	0	96	0	1	0	N/A	N/A	N/A	N/A
100	E100	3	1	2	B	13	29	56	0	2	0	96	97	15	19
101	C1	1	3	2	D	8	25	67	0	0	0	24	35	0	5.3
102	C2	1	1	1	B	13	32	53	1	1	31	33	72	51	85
103	C3	1	3	2	C	4	27	58	0	10	10	78	60	3.6	9.7
104	C4	1	2	2	C	2	14	84	0	0	0	43	58	2	11.1
105	C5	2	2	2	D	9	22	30	39	0	0	22	38	N/A	N/A
106	C6	1	2	2	D	12	35	39	1.4	12	13	63	66	37.3	28.3
107	C7	3	1	1	A	66	28	6	0	0	0	11	20	174	144
108	C8	1	2	1	B	0	41	43	7	9	16	51	180	N/A	N/A
109	C9	1	2	2	A	17	34	45	3.3	0	4	149	114	N/A	N/A
110	C10	1	1	2	F	15	0	86	0	0	0	N/A	27	0	0
111	C11	2	2	1	E	6	0	94	0	0	0	0	22	N/A	4.3
112	C12	1	2	1	F	N/a	n/a	N/a	n/a	n/a	1	N/A	N/A	N/A	N/A
113	C13	2	3	1	D	19	30	51	0	0	0	55	52	3.2	28.7

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1980	% Bonds 1980	% Stocks 1980	% Real Estate 1980	% Miscel- laneous Assets 1980	Non- Control- lable Assets 1980	6/30/80 # Bonds	6/30/80 # Stocks	1980 Bond Turn- Over %	1980 Stock Turn- Over %
114	C14	1	2	1	D	21	0	79	0	0	0	0	56	N/A	196
115	C15	1	2	1	A	20	22	53	4.4	0	0	64	82	21.1	9.6
116	C16	4	4	1	C	13	22	58	0	6	6	27	54	1.2	14.2
117	C17	1	2	2	C	16	31	52	0	1	5	85	131	103.9	29.5
118	C18	1	1	1	D	18	20	58	0	4	0	4	69	76	20.8
119	C19	1	3	2	D	2	70	28	0	0	0	68	40	4	12
120	C20	3	3	1	E	18	53	28	0	1	1	19	30	0	29
121	C21	1	2	2	C	18	44	38	0.4	0	0	39	35	17	52.8
122	C22	1	1	1	A	3	35	47	3	12	12	139	195	73.5	23.5
123	C23	1	2	2	F	16	42	33	6	3	9	33	49	33.6	35.7
124	C24	1	2	1	D	11	19	70	0	0	0	21	37	11.4	36.6
125	C25	4	2	2	A	10	20	70	0	0	0	22	129	91.4	30.9
126	C26	1	2	1	D	21	25	54	0	0	0	N/A	N/A	69.5	10.3
127	C27	1	2	2	A	N/a	n/a	N/a	n/a	n/a	0	N/A	N/A	14.7	12
128	C28	1	1	1	D	10	0	74	0.5	15	23	4	10	40	10.5
129	C29	1	2	2	A	6	27	64	3.1	0	5	81	180	95	80
130	C30	1	3	2	F	27	13	60	0	0	0	7	28	0	49
131	C31	1	2	2	B	13	11	58	0.5	18	0	15	80	26.1	47.3
132	C32	1	2	2	D	23	41	35	0	1	2	N/A	2	7	23
133	C33	5	2	3	F	8	47	45	0	0	0	36	27	0	1.3
134	C34	1	2	1	D	15	24	49	10	2	10	N/A	N/A	N/A	N/A
135	C35	1	2	1	D	3	2	60	13.3	23	8	3	57	66.6	55.7
136	C36	3	2	2	E	16	47	37	0	0	0	25	15	0.7	40.1
137	C37	3	2	3	F	12	70	18	0	0	0	20	10	6.9	71.3
138	C38	4	1	2	C	13	20	40	9	18	0	62	66	0	7.4
139	C39	1	2	1	C	10	18	72	0	0	0	36	47	N/A	229
140	C40	1	2	2	F	10	17	73	0	0	1	4	37	24.1	21.7
141	C41	1	3	2	D	5	20	70	5	0	5	39	57	0	13
142	C42	3	2	1	B	13	14	73	0	1	1	N/A	N/A	N/A	N/A
143	C43	4	1	1	F	25	0	75	0	0	0	0	19	6.3	57.5
144	C44	1	2	1	F	0	47	53	0	0	0	N/A	N/A	0	13.2
145	C45	1	2	1	D	8	33	60	0	0	1	49	51	39	28
146	C46	4	2	2	E	25	20	36	2.7	16	25	20	38	89.5	35
147	C47	1	2	2	D	7	45	49	0	0	0	65	35	0	22
148	C48	1	2	2	D	10	47	43	0	0	0	N/A	N/A	N/A	N/A
149	C49	1	2	2	D	0	54	45	0.2	0	1	N/A	N/A	N/A	N/A
150	C50	1	2	2	F	23	24	53	0	0	0	13	32	0	10.2
151	C51	1	2	2	F	7	32	61	0	0	1	4	18	0	21
152	C52	1	2	2	F	17	38	45	0	0	1	21	46	11	27

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1980	% Bonds 1980	% Stocks 1980	% Real Estate 1980	% Miscel-laneous Assets 1980	Non-Control-lable Assets 1980	6/30/80 # Bonds	6/30/80 # Stocks	1980 Bond Turn-Over %	1980 Stock Turn-Over %
153	C53	1	2	2	F	7	40	53	0	0	0	20	38	10.3	27.2
154	C54	1	1	2	A	15	38	38	0	9	16	60	70	N/A	N/A
155	C55	1	3	2	A	3	21	74	2	0	0	85	112	6.7	2.4
156	C56	1	2	2	A	10	24	61	5.2	1	1	51	72	12.5	11.4
157	C57	1	1	1	D	14	33	50	0	3	3	15	55	1	290
158	C58	1	2	1	D	13	25	66	0	0	1	N/A	N/A	N/A	N/A
159	C59	1	2	2	B	13	45	42	0	0	0	249	104	0	0.1
160	C60	1	2	2	B	1	41	59	0	0	1	67	120	N/A	N/A
161	C61	1	3	2	A	5	53	42	0	0	0	666	144	1.1	1.9
162	C62	1	2	1	F	0	25	76	0	0	0	N/A	N/A	N/A	N/A
163	C63	1	2	2	C	1	19	79	0.2	1	1	21	64	10.8	29.1
164	C64	1	2	2	E	0	40	30	0	30	0	30	29	22.1	0
165	C65	1	3	2	C	6	29	65	0	0	0	79	78	23.8	22.3
166	C66	1	2	1	D	33	9	55	0	4	3	3	62	17	129
167	C67	1	2	3	D	60	30	10	0	0	0	52	32	47.1	18.4
168	C68	1	2	2	A	N/a	n/a	N/a	n/a	n/a	1	83	56	N/A	N/A
169	C69	1	2	2	F	83	0	17	0	0	0	N/A	5	0	0
170	C70	1	2	2	D	9	8	64	3	16	12	2	47	N/A	35
171	C71	1	2	2	D	9	41	47	0.2	3	5	71	81	26.6	28.8
172	C72	1	3	2	A	12	30	48	10.6	0	1	39	59	21.1	16.5
173	C73	1	3	2	F	7	52	41	0	0	0	19	29	17.6	40.3
174	C74	1	2	2	D	18	9	11	35.9	27	8	32	78	0.3	6.8
175	C75	1	3	1	F	11	25	64	0	0	0	32	58	3.3	8.1
176	C76	1	2	1	D	23	20	56	0	0	0	14	34	94.7	84.7
177	C77	3	2	1	A	2	6	92	0	0	0	35	131	0.4	9.3
178	C78	1	2	2	E	15	41	43	0	0	0	14	38	15.4	13.7
179	C79	1	2	2	D	2	45	53	0	0	0	56	43	33.9	7.9
180	C80	2	2	2	F	0	1	0	3.1	96	0	N/A	N/A	N/A	N/A
181	C82	3	2	2	B	13	20	67	0	0	1	N/A	N/A	45	51
182	C83	1	2	1	D	38	28	34	0	0	6	1	52	N/A	N/A
183	C84	1	2	2	D	10	53	37	0	0	0	31	32	19.2	18.5
184	C85	1	2	2	E	13	44	39	0	4	0	28	20	24	19
185	C86	1	3	1	E	38	20	42	0	1	0	14	51	2.1	3.3
186	C87	1	2	2	F	6	26	68	0	0	0	10	47	N/A	N/A
187	C88	4	2	2	E	20	36	36	0.3	8	8	33	30	0	12.2
188	C89	3	2	2	D	13	40	34	13.4	0	13	55	53	41.5	84.1
189	C90	1	2	2	D	22	73	5	0	0	0	N/A	N/A	0	0
190	C91	1	2	2	F	29	34	38	0	0	1	10	23	10.6	12.9
191	C92	2	2	2	E	34	48	15	3.3	0	20	18	11	31.9	10.6
192	C93	1	2	1	D	8	15	77	0	0	0	15	39	N/A	12

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1980	% Bonds 1980	% Stocks 1980	% Real Estate 1980	% Miscel-laneous Assets 1980	Non-Controllable Assets 1980	6/30/80 # Bonds	6/30/80 # Stocks	1980 Bond Turn-Over %	1980 Stock Turn-Over %
193	C94	1	2	2	D	21	3	23	28	25	24	8	85	0	9
194	C95	4	2	2	F	22	43	35	0	0	1	33	29	0	13.8
195	C96	4	2	2	B	5	63	32	0	0	4	40	60	13.2	27.9
196	C97	4	2	2	F	49	0	51	0	0	0	0	27	0	6.6
197	C98	1	3	1	D	3	26	68	2.1	1	27	6	19	1.4	13.6
198	C99	2	4	1	D	2	5	94	0	0	17	3	28	1.6	39.5
# Ans		198	198	198	198	194	194	194	194	193	198	175	179	153	161
Average						14.2	20.1	52.8	1.6	3.1	3.0	27	51	15.0	21.7

EXHIBIT III

DETAILED PERFORMANCE SUMMARY

AVERAGE ANNUAL TOTAL RETURN

This exhibit shows in detail the average annual total return performance of all investment pools and various bond and equity indices for the one-, three-, five-, and ten-year periods ending June 30, 1980. For example, investment pool E89 for the one-year period had a return of 42.37%, which was the highest return among all pools and indices in the 1980 Comparative Performance Study. This pool had an average annual return of 16.21% for the three-year period and ranked thirty-seventh. Performance of pools is also ranked based on investment objective and investment size categories. Lastly, beta and efficiency measure ranking is shown for those pools with at least five years data. A separate ranking is also included for the Equity Only and Bond Only portion of pools for the three- and five-year period. The table below shows the number of pools participating based on the various groupings.

Number of Pools Participating

Grouping - Ending June 30, 1980	1 Year	3 Years	5 Years	10 Years
Page 68 - All Pools	198	187	176	127
Page 73 - Total Return	78	73	69	53
Page 75 - Balanced or Income Oriented	120	114	107	74
Page 78 - Over $50 Million	57	53	52	43
Page 80 - $10-$50 Million	85	81	76	59
Page 82 - Under $10 Million	56	53	48	25
Page 88 - Equity Only	29	22	17	N/A
Page 88 - Bond Only	21	15	9	N/A
Page 84 - Beta and Efficiency	N/A	N/A	176	127

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E89	42.37 %	7	16.21 %	9	12.62 %	N/A	%
2	E94	29.02	4	17.01	N/A		N/A	
3	C14	27.78	11	14.97	N/A		N/A	
4	E25	25.68	9	15.25	10	12.54	11	9.68
5	E5	25.29	8	15.86	20	11.71	20	9.11
6	E54	24.79	3	17.2	4	13.16	23	9.01
7	E99	24.21	6	16.22	3	14	N/A	
8	E34	23.57	17	13.47	31	10.62	77	7.25
9	C63	23.42	5	16.44	7	12.8	9	9.9
10	COM-FDEQ	22.78	1	17.45	19	11.72	N/A	
11	C77	22.64	18	13.36	5	13.1	3	12.17
12	E19	21.55	12	14.86	12	12.34	31	8.74
13	C66	21.49	20	12.7	28	10.84	N/A	
14	E30	21.45	70	9.31	84	7.96	46	8.15
15	E11	20.15	21	12.24	37	10.16	15	9.36
16	E26	20.13	13	14.33	15	11.85	36	8.43
17	E12	19.51	35	10.67	N/A		N/A	
18	E86	19.13	N/A		N/A		N/A	
19	C4	19.05	41	10.36	18	11.73	N/A	
20	C40	18.67	45	10.26	21	11.62	4	12.1
21	E36	18.39	25	11.44	58	8.79	44	8.2
22	SP-IND	18.35	42	10.35	71	8.43	29	8.91
23	C28	18.18	19	13.15	36	10.16	N/A	
24	C29	18.1	74	9.14	86	7.85	66	7.52
25	C25	18.09	26	11.36	41	9.65	24	8.99
26	E38	18.08	49	10.1	25	10.95	22	9.03
27	C45	17.99	N/A		N/A		N/A	
28	E49	17.93	28	11.32	39	9.93	90	6.98
29	C48	17.79	57	9.89	54	8.96	N/A	
30	C42	17.72	53	10.07	101	7.53	79	7.19
31	C35	17.64	10	15	6	13.09	N/A	
32	E40	17.64	78	8.94	74	8.28	70	7.39
33	C31	17.6	140	6.42	132	6.83	N/A	
34	E93	17.54	47	10.24	163	5.37	N/A	
35	C80	17.49	99	8.22	122	7.02	118	5.93
36	E21	17.13	29	11.16	64	8.69	50	7.91
37	SP500	17.13	58	9.89	65	8.67	28	8.93
38	C8	17.11	69	9.42	123	7.01	N/A	
39	E53	17.01	33	10.74	29	10.82	18	9.24
40	E43	16.91	14	14.17	11	12.44	6	10.92
41	C87	16.79	30	11.06	117	7.13	56	7.68
42	E37	16.47	44	10.3	38	10.09	86	7.05
43	E42	16.42	61	9.72	N/A		N/A	
44	E81	16.35	116	7.37	107	7.43	94	6.87
45	E8	16.22	48	10.19	51	9.08	58	7.65

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
46	C57	16.17 %	89	8.44 %	173	4.91 %	128	4.35 %
47	E56	16.04	77	8.95	110	7.39	61	7.59
48	E45	15.75	36	10.62	24	11.1	26	8.98
49	C39	15.64	73	9.16	89	7.81	35	8.5
50	E1	15.58	68	9.5	66	8.67	104	6.38
51	C98	15.55	16	13.86	8	12.68	2	12.78
52	C24	15.46	38	10.43	22	11.57	N/A	
53	C53	15.46	39	10.43	N/A		N/A	
54	E57	15.45	72	9.2	52	9.04	30	8.86
55	C54	15.32	2	17.28	14	12.07	8	10.18
56	E79	15.24	59	9.83	79	8.06	39	8.33
57	E76	15.21	92	8.35	137	6.59	N/A	
58	E50	15.01	50	10.1	129	6.87	120	5.57
59	E59	14.96	87	8.49	61	8.75	84	7.11
60	E46	14.86	55	9.99	109	7.41	41	8.22
61	E20	14.82	90	8.42	73	8.41	21	9.1
62	E33	14.82	27	11.32	135	6.79	54	7.75
63	C15	14.75	51	10.1	40	9.83	92	6.92
64	E52	14.71	106	7.99	113	7.28	88	7.02
65	C93	14.46	96	8.28	N/A		N/A	
66	E68	14.29	71	9.26	100	7.53	73	7.32
67	C13	14.26	32	10.81	42	9.6	32	8.67
68	E3	14.17	65	9.57	87	7.84	38	8.34
69	C22	14.03	67	9.52	68	8.5	98	6.72
70	E70	13.89	66	9.56	N/A		N/A	
71	C82	13.81	60	9.74	62	8.71	106	6.3
72	E80	13.68	23	11.84	33	10.38	45	8.15
73	E29	13.57	83	8.56	49	9.14	111	6.21
74	C18	13.49	54	10.01	16	11.8	5	11.78
75	E92	13.13	127	6.92	44	9.56	12	9.67
76	C7	13.05	110	7.69	147	6.19	130	4.1
77	E51	13.05	24	11.72	78	8.07	14	9.43
78	C65	13.04	80	8.85	48	9.17	13	9.48
79	E27	13.01	111	7.68	138	6.59	69	7.43
80	C51	12.98	76	9.1	77	8.25	N/A	
81	E63	12.98	56	9.92	131	6.84	74	7.32
82	E96	12.95	102	8.14	50	9.12	N/A	
83	C2	12.87	82	8.67	81	8	55	7.68
84	E65	12.77	94	8.3	47	9.2	60	7.63
85	C44	12.65	22	12.03	30	10.63	96	6.83
86	C85	12.4	64	9.63	27	10.85	59	7.64
87	C95	12.38	100	8.21	90	7.78	N/A	
88	E98	12.33	63	9.64	112	7.34	105	6.3
89	C41	12.27	46	10.25	13	12.08	19	9.11
90	C60	12.17	43	10.35	59	8.79	25	8.98

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
91	E17	12.16 %	121	7.17 %	72	8.43 %	34	8.55 %
92	C58	12.14	98	8.25	145	6.23	97	6.79
93	C17	11.93	93	8.35	118	7.12	116	6.08
94	C55	11.88	75	9.13	43	9.57	17	9.25
95	E66	11.83	95	8.29	174	4.81	N/A	
96	E61	11.8	40	10.38	17	11.74	N/A	
97	E91	11.8	88	8.47	114	7.27	68	7.46
98	C92	11.79	84	8.55	69	8.5	N/A	
99	C43	11.77	120	7.21	83	7.97	N/A	
100	E72	11.55	101	8.16	53	8.97	53	7.78
101	E6	11.52	122	7.15	154	5.94	51	7.87
102	C34	11.5	62	9.67	127	6.89	65	7.55
103	C1	11.44	123	7.1	60	8.78	N/A	
104	E15	11.36	138	6.57	124	6.99	103	6.5
105	C73	11.36	142	6.31	N/A		N/A	
106	E32	11.2	133	6.79	67	8.66	80	7.18
107	C94	11.16	31	11.04	26	10.85	N/A	
108	E16	10.95	97	8.26	88	7.81	52	7.8
109	E85	10.83	107	7.98	56	8.88	N/A	
110	E75	10.71	128	6.88	2	14.44	7	10.78
111	C72	10.63	103	8.11	32	10.41	10	9.82
112	E62	10.6	104	8.07	102	7.49	64	7.56
113	C99	10.5	15	13.95	1	17.05	1	29.49
114	C88	10.5	114	7.53	133	6.81	N/A	
115	C86	10.46	91	8.39	46	9.36	27	8.93
116	C6	10.42	125	6.94	140	6.51	117	5.97
117	C96	10.41	52	10.09	34	10.21	N/A	
118	C67	10.34	115	7.49	55	8.89	N/A	
119	E71	10.12	131	6.81	104	7.46	62	7.58
120	C9	10.1	129	6.88	128	6.88	71	7.36
121	C21	10.03	174	4.29	177	4.11	124	4.95
122	E95	10	132	6.8	150	6.03	126	4.86
123	E47	9.98	N/A		N/A		N/A	
124	E31	9.85	108	7.76	35	10.21	N/A	
125	C56	9.82	81	8.82	45	9.52	42	8.22
126	C75	9.79	117	7.32	70	8.49	72	7.36
127	E60	9.71	146	6.05	130	6.84	101	6.55
128	C32	9.71	163	5.15	91	7.77	81	7.17
129	E74	9.69	118	7.23	120	7.03	N/A	
130	E78	9.62	151	5.94	76	8.27	40	8.25
131	C5	9.52	109	7.7	116	7.15	95	6.84
132	D-JONES	9.45	178	3.98	171	4.98	82	7.15
133	E18	9.43	113	7.58	165	5.28	75	7.3
134	C26	9.35	105	7.99	80	8.02	49	7.92
135	C16	9.34	156	5.77	144	6.24	113	6.2

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
136	E39	9.31%	137	6.57%	103	7.47%	123	4.97 %
137	E55	9.24	N/A		N/A		N/A	
138	E67	9.2	130	6.82	75	8.27	47	8.05
139	E44	9.19	162	5.3	169	5.09	67	7.49
140	E77	9.17	119	7.23	98	7.64	N/A	
141	C50	8.93	126	6.93	148	6.18	83	7.14
142	E64	8.87	79	8.9	105	7.46	127	4.61
143	C70	8.84	141	6.37	97	7.68	78	7.2
144	C27	8.82	34	10.69	23	11.49	37	8.41
145	C30	8.72	145	6.15	96	7.7	109	6.29
146	C36	8.66	147	6.01	156	5.79	N/A	
147	C79	8.58	154	5.8	115	7.17	N/A	
148	C83	8.49	85	8.53	134	6.79	N/A	
149	C97	8.47	N/A		N/A		N/A	
150	E2	8.45	86	8.5	92	7.77	93	6.9
151	E83	8.44	152	5.87	126	6.96	N/A	
152	C46	8.39	150	5.96	125	6.97	N/A	
153	E14	8.27	136	6.58	95	7.72	91	6.96
154	E35	8.25	135	6.73	175	4.76	108	6.3
155	E84	8.16	167	4.72	136	6.69	N/A	
156	C76	8.12	160	5.49	161	5.6	16	9.32
157	E10	7.92	139	6.46	172	4.96	110	6.22
158	C11	7.89	N/A		N/A		N/A	
159	C59	7.82	N/A		N/A		N/A	
160	E82	7.78	148	6	106	7.46	N/A	
161	C20	7.6	161	5.35	179	3.16	121	5.52
162	C78	7.57	153	5.85	170	5	131	3.92
163	C62	7.54	159	5.52	85	7.94	N/A	
164	C3	7.5	169	4.67	152	5.98	89	7.02
165	E90	7.44	149	5.97	119	7.04	N/A	
166	E100	7.12	157	5.72	N/A		N/A	
167	E73	7.08	143	6.2	93	7.76	87	7.02
168	C52	6.93	134	6.74	108	7.43	85	7.08
169	E41	6.85	171	4.52	141	6.35	N/A	
170	C64	6.77	164	4.91	121	7.03	48	7.95
171	C38	6.38	112	7.67	94	7.74	57	7.66
172	C84	6.37	166	4.79	160	5.6	33	8.65
173	C37	6.36	170	4.61	157	5.74	N/A	
174	C12	6.08	182	3.76	151	5.98	N/A	
175	C74	6.05	37	10.57	57	8.85	63	7.57
176	C23	6.05	165	4.89	143	6.24	107	6.3
177	E48	5.87	168	4.71	176	4.25	N/A	
178	E58	5.71	N/A		N/A		N/A	
179	C61	5.63	N/A		N/A		N/A	
180	E4	5.47	124	6.99	162	5.42	112	6.21

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
181	E97	5.08 %	177	4 %	111	7.35%	115	6.1 %
182	C47	4.98	184	3.73	155	5.81	76	7.26
183	E24	4.68	155	5.78	63	8.7	N/A	
184	E69	4.49	176	4.19	182	0	122	5.25
185	C19	3.76	179	3.96	139	6.51	N/A	
186	C89	3.49	175	4.25	146	6.22	N/A	
187	E7	3.25	172	4.38	178	3.3	N/A	
188	E22	3.22	181	3.86	99	7.61	43	8.21
189	C90	3.02	N/A		N/A		N/A	
190	C10	2.64	158	5.58	166	5.25	N/A	
191	E13	2.49	185	3.67	164	5.36	100	6.58
192	C33	2.23	189	2.9	N/A		N/A	
193	E23	2.01	173	4.35	159	5.72	114	6.14
194	C49	1.96	183	3.76	167	5.18	125	4.95
195	E28	1.88	144	6.16	158	5.73	119	5.87
196	E87	1.78	190	2.57	82	8	102	6.54
197	C68	1.55	N/A		N/A		N/A	
198	C71	1.04	188	3.28	180	3.14	129	4.27
199	C69	0.38	186	3.59	149	6.06	N/A	
200	COM-FDBD	0.3	180	3.87	N/A		N/A	
201	E88	-1.51	192	1.76	153	5.97	N/A	
202	E9	-1.92	187	3.3	N/A		N/A	
203	LEH-KUHN	-2.16	193	1.53	142	6.25	N/A	
204	SALOMON	-3.66	194	0.61	168	5.15	99	6.63
205	C91	-6.42	191	2.01	181	1.43	N/A	

TOTAL POOLS
(AVERAGE RETURN)

198		11.90%	187	8.41%	176	8.12%	127	7.77%

POOLS WITH A
TOTAL RETURN INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C14	27.78 %	7	14.97 %	N/A	%	N/A	%
2	E25	25.68	5	15.25	8	12.54	6	9.68
3	E5	25.29	4	15.86	12	11.71	10	9.11
4	E54	24.79	2	17.2	4	13.16	12	9.01
5	E99	24.21	3	16.22	3	14	N/A	
6	COM-FDEQ	22.78	1	17.45	11	11.72	N/A	
7	C77	22.64	11	13.36	5	13.1	3	12.17
8	E19	21.55	8	14.86	9	12.34	17	8.74
9	C66	21.49	13	12.7	15	10.84	N/A	
10	E11	20.15	14	12.24	19	10.16	8	9.36
11	E86	19.13	N/A		N/A		N/A	
12	E36	18.39	17	11.44	28	8.79	21	8.2
13	SP-IND	18.35	23	10.35	33	8.43	16	8.91
14	C28	18.18	12	13.15	18	10.16	N/A	
15	C45	17.99	N/A		N/A		N/A	
16	E49	17.93	19	11.32	20	9.93	38	6.98
17	C42	17.72	28	10.07	45	7.53	36	7.19
18	E40	17.64	40	8.94	35	8.28	31	7.39
19	C35	17.64	6	15	6	13.09	N/A	
20	E93	17.54	24	10.24	66	5.37	N/A	
21	SP500	17.13	31	9.89	30	8.67	15	8.93
22	C8	17.11	37	9.42	51	7.01	N/A	
23	E42	16.42	32	9.72	N/A		N/A	
24	E81	16.35	59	7.37	49	7.43	40	6.87
25	E8	16.22	25	10.19	27	9.08	26	7.65
26	C57	16.17	45	8.44	71	4.91	56	4.35
27	E45	15.75	21	10.62	14	11.1	13	8.98
28	C39	15.64	39	9.16	43	7.81	19	8.5
29	C98	15.55	10	13.86	7	12.68	2	12.78
30	C24	15.46	22	10.43	13	11.57	N/A	
31	E50	15.01	26	10.1	53	6.87	50	5.57
32	E20	14.82	46	8.42	34	8.41	11	9.1
33	E33	14.82	18	11.32	55	6.79	24	7.75
34	C15	14.75	27	10.1	21	9.83	39	6.92
35	C93	14.46	50	8.28	N/A		N/A	
36	E68	14.29	38	9.26	44	7.53	34	7.32
37	C13	14.26	20	10.81	22	9.6	18	8.67
38	E3	14.17	35	9.57	41	7.84	20	8.34
39	C22	14.03	36	9.52	31	8.5	43	6.72
40	E29	13.57	43	8.56	25	9.14	47	6.21
41	C18	13.49	29	10.01	10	11.8	4	11.78
42	E51	13.05	16	11.72	36	8.07	7	9.43
43	C7	13.05	56	7.69	61	6.19	57	4.1
44	E27	13.01	57	7.68	57	6.59	30	7.43
45	E63	12.98	30	9.92	54	6.84	33	7.32
46	E96	12.95	53	8.14	26	9.12	N/A	
47	C2	12.87	42	8.67	38	8	25	7.68

POOLS WITH A TOTAL RETURN INVESTMENT OBJECTIVE AVERAGE ANNUAL TOTAL RETURN PERFORMANCE FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
48	E65	12.77 %	48	8.3 %	24	9.2 %	27	7.63 %
49	C44	12.65	15	12.03	16	10.63	41	6.83
50	E98	12.33	34	9.64	50	7.34	45	6.3
51	C58	12.14	52	8.25	60	6.23	42	6.79
52	E66	11.83	49	8.29	72	4.81	N/A	
53	C43	11.77	61	7.21	39	7.97	N/A	
54	C34	11.5	33	9.67	52	6.89	29	7.55
55	E16	10.95	51	8.26	42	7.81	23	7.8
56	E75	10.71	63	6.88	2	14.44	5	10.78
57	C99	10.5	9	13.95	1	17.05	1	29.49
58	C86	10.46	47	8.39	23	9.36	14	8.93
59	E71	10.12	64	6.81	48	7.46	28	7.58
60	E95	10	65	6.8	62	6.03	54	4.86
61	E47	9.98	N/A		N/A		N/A	
62	E31	9.85	55	7.76	17	10.21	N/A	
63	C75	9.79	60	7.32	32	8.49	32	7.36
64	D-JONES	9.45	75	3.98	69	4.98	37	7.15
65	E18	9.43	58	7.58	67	5.28	35	7.3
66	C26	9.35	54	7.99	37	8.02	22	7.92
67	C16	9.34	69	5.77	59	6.24	49	6.2
68	E39	9.31	66	6.57	46	7.47	53	4.97
69	E55	9.24	N/A		N/A		N/A	
70	E64	8.87	41	8.9	47	7.46	55	4.61
71	C83	8.49	44	8.53	56	6.79	N/A	
72	C76	8.12	71	5.49	64	5.6	9	9.32
73	E10	7.92	67	6.46	70	4.96	46	6.22
74	C11	7.89	N/A		N/A		N/A	
75	C20	7.6	72	5.35	74	3.16	51	5.52
76	C62	7.54	70	5.52	40	7.94	N/A	
77	C12	6.08	77	3.76	63	5.98	N/A	
78	E4	5.47	62	6.99	65	5.42	48	6.21
79	E24	4.68	68	5.78	29	8.7	N/A	
80	E69	4.49	74	4.19	75	0	52	5.25
81	E7	3.25	73	4.38	73	3.3	N/A	
82	COM-FDBD	0.3	76	3.87	N/A		N/A	
83	E9	-1.92	78	3.3	N/A		N/A	
84	LEH-KUHN	-2.16	79	1.53	58	6.25	N/A	
85	SALOMON	-3.66	80	0.61	68	5.15	44	6.63
TOTAL POOLS (AVERAGE RETURN)								
78		13.57%	73	9.42%	69	8.46%	53	8.05%

POOLS WITH A
BALANCED OR INCOME INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E89	42.37 %	5	16.21 %	2	12.62 %	N/A	%
2	E94	29.02	3	17.01	N/A		N/A	
3	E34	23.57	8	13.47	16	10.62	44	7.25
4	C63	23.42	4	16.44	1	12.8	4	9.9
5	COM-FDEQ	22.78	1	17.45	9	11.72	N/A	
6	E30	21.45	36	9.31	48	7.96	27	8.15
7	E26	20.13	6	14.33	6	11.85	19	8.43
8	E12	19.51	16	10.67	N/A		N/A	
9	C4	19.05	20	10.36	8	11.73	N/A	
10	C40	18.67	24	10.26	10	11.62	1	12.1
11	SP-IND	18.35	21	10.35	41	8.43	15	8.91
12	C29	18.1	38	9.14	49	7.85	39	7.52
13	C25	18.09	10	11.36	21	9.65	12	8.99
14	E38	18.08	26	10.1	12	10.95	11	9.03
15	C48	17.79	29	9.89	28	8.96	N/A	
16	C31	17.6	76	6.42	81	6.83	N/A	
17	C80	17.49	50	8.22	75	7.02	73	5.93
18	E21	17.13	11	11.16	36	8.69	30	7.91
19	SP500	17.13	30	9.89	37	8.67	14	8.93
20	E53	17.01	14	10.74	15	10.82	9	9.24
21	E43	16.91	7	14.17	3	12.44	2	10.92
22	C87	16.79	12	11.06	70	7.13	33	7.68
23	E37	16.47	23	10.3	20	10.09	52	7.05
24	E56	16.04	41	8.95	64	7.39	36	7.59
25	E1	15.58	35	9.5	38	8.67	64	6.38
26	C53	15.46	18	10.43	N/A		N/A	
27	E57	15.45	37	9.2	26	9.04	16	8.86
28	C54	15.32	2	17.28	5	12.07	3	10.18
29	E79	15.24	31	9.83	46	8.06	21	8.33
30	E76	15.21	48	8.35	84	6.59	N/A	
31	E59	14.96	46	8.49	34	8.75	50	7.11
32	E46	14.86	28	9.99	63	7.41	24	8.22
33	E52	14.71	55	7.99	66	7.28	54	7.02
34	E70	13.89	34	9.56	N/A		N/A	
35	C82	13.81	32	9.74	35	8.71	66	6.3
36	E80	13.68	9	11.84	18	10.38	26	8.15
37	E92	13.13	68	6.92	23	9.56	6	9.67
38	C65	13.04	42	8.85	25	9.17	7	9.48
39	C51	12.98	40	9.1	45	8.25	N/A	
40	C85	12.4	33	9.63	14	10.85	35	7.64
41	C95	12.38	51	8.21	50	7.78	N/A	
42	C41	12.27	25	10.25	4	12.08	10	9.11
43	C60	12.17	22	10.35	32	8.79	13	8.98
44	E17	12.16	63	7.17	42	8.43	18	8.55
45	C17	11.93	49	8.35	71	7.12	71	6.08
46	C55	11.88	39	9.13	22	9.57	8	9.25
47	E91	11.8	47	8.47	67	7.27	41	7.46

POOLS WITH A
BALANCED OR INCOME INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
48	E61	11.8 %	19	10.38 %	7	11.74 %	N/A	%
49	C92	11.79	44	8.55	40	8.5	N/A	
50	E72	11.55	52	8.16	27	8.97	32	7.78
51	E6	11.52	64	7.15	95	5.94	31	7.87
52	C1	11.44	65	7.1	33	8.78	N/A	
53	C73	11.36	78	6.31	N/A		N/A	
54	E15	11.36	75	6.57	76	6.99	63	6.5
55	E32	11.2	71	6.79	39	8.66	46	7.18
56	C94	11.16	13	11.04	13	10.85	N/A	
57	E85	10.83	56	7.98	30	8.88	N/A	
58	C72	10.63	53	8.11	17	10.41	5	9.82
59	E62	10.6	54	8.07	60	7.49	38	7.56
60	C88	10.5	59	7.53	82	6.81	N/A	
61	C6	10.42	66	6.94	86	6.51	72	5.97
62	C96	10.41	27	10.09	19	10.21	N/A	
63	C67	10.34	60	7.49	29	8.89	N/A	
64	C9	10.1	69	6.88	79	6.88	42	7.36
65	C21	10.03	104	4.29	111	4.11	76	4.95
66	C56	9.82	43	8.82	24	9.52	23	8.22
67	E60	9.71	82	6.05	80	6.84	61	6.55
68	C32	9.71	94	5.15	52	7.77	47	7.17
69	E74	9.69	62	7.23	73	7.03	N/A	
70	E78	9.62	87	5.94	44	8.27	22	8.25
71	C5	9.52	57	7.7	69	7.15	58	6.84
72	D-JONES	9.45	107	3.98	108	4.98	48	7.15
73	E67	9.2	70	6.82	43	8.27	28	8.05
74	E44	9.19	93	5.3	106	5.09	40	7.49
75	E77	9.17	61	7.23	58	7.64	N/A	
76	C50	8.93	67	6.93	91	6.18	49	7.14
77	C70	8.84	77	6.37	57	7.68	45	7.2
78	C27	8.82	15	10.69	11	11.49	20	8.41
79	C30	8.72	81	6.15	56	7.7	68	6.29
80	C36	8.66	83	6.01	97	5.79	N/A	
81	C79	8.58	90	5.8	68	7.17	N/A	
82	C97	8.47	N/A		N/A		N/A	
83	E2	8.45	45	8.5	51	7.77	57	6.9
84	E83	8.44	88	5.87	78	6.96	N/A	
85	C46	8.39	86	5.96	77	6.97	N/A	
86	E14	8.27	74	6.58	55	7.72	56	6.96
87	E35	8.25	73	6.73	109	4.76	67	6.3
88	E84	8.16	98	4.72	83	6.69	N/A	
89	C59	7.82	N/A		N/A		N/A	
90	E82	7.78	84	6	61	7.46	N/A	
91	C78	7.57	89	5.85	107	5	78	3.92
92	C3	7.5	100	4.67	93	5.98	55	7.02
93	E90	7.44	85	5.97	72	7.04	N/A	
94	E100	7.12	91	5.72	N/A		N/A	
95	E73	7.08	79	6.2	53	7.76	53	7.02

POOLS WITH A BALANCED OR INCOME INVESTMENT OBJECTIVE AVERAGE ANNUAL TOTAL RETURN PERFORMANCE FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
96	C52	6.93 %	72	6.74 %	62	7.43 %	51	7.08 %
97	E41	6.85	102	4.52	87	6.35	N/A	
98	C64	6.77	95	4.91	74	7.03	29	7.95
99	C38	6.38	58	7.67	54	7.74	34	7.66
100	C84	6.37	97	4.79	101	5.6	17	8.65
101	C37	6.36	101	4.61	98	5.74	N/A	
102	C74	6.05	17	10.57	31	8.85	37	7.57
103	C23	6.05	96	4.89	89	6.24	65	6.3
104	E48	5.87	99	4.71	110	4.25	N/A	
105	E58	5.71	N/A		N/A		N/A	
106	C61	5.63	N/A		N/A		N/A	
107	E97	5.08	106	4	65	7.35	70	6.1
108	C47	4.98	112	3.73	96	5.81	43	7.26
109	C19	3.76	108	3.96	85	6.51	N/A	
110	C89	3.49	105	4.25	90	6.22	N/A	
111	E22	3.22	110	3.86	59	7.61	25	8.21
112	C90	3.02	N/A		N/A		N/A	
113	C10	2.64	92	5.58	103	5.25	N/A	
114	E13	2.49	113	3.67	102	5.36	60	6.58
115	C33	2.23	116	2.9	N/A		N/A	
116	E23	2.01	103	4.35	100	5.72	69	6.14
117	C49	1.96	111	3.76	104	5.18	75	4.95
118	E28	1.88	80	6.16	99	5.73	74	5.87
119	E87	1.78	117	2.57	47	8	62	6.54
120	C68	1.55	N/A		N/A		N/A	
121	C71	1.04	115	3.28	112	3.14	77	4.27
122	C69	0.38	114	3.59	92	6.06	N/A	
123	COM-FDBD	0.3	109	3.87	N/A		N/A	
124	E88	-1.51	119	1.76	94	5.97	N/A	
125	LEH-KUHN	-2.16	120	1.53	88	6.25	N/A	
126	SALOMON	-3.66	121	0.61	105	5.15	59	6.63
127	C91	-6.42	118	2.01	113	1.43	N/A	
TOTAL POOLS (AVERAGE RETURN)								
120		10.81%	114	7.77%	107	7.90%	74	7.57%

INVESTMENT POOLS OVER $50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E89	42.37 %	3	16.21 %	2	12.62 %	N/A	%
2	E5	25.29	4	15.86	7	11.71	6	9.11
3	E34	23.57	6	13.47	11	10.62	34	7.25
4	COM-FDEQ	22.78	1	17.45	6	11.72	N/A	
5	C77	22.64	7	13.36	1	13.1	1	12.17
6	E19	21.55	5	14.86	3	12.34	14	8.74
7	E30	21.45	31	9.31	36	7.96	20	8.15
8	E11	20.15	8	12.24	15	10.16	4	9.36
9	E36	18.39	9	11.44	25	8.79	19	8.2
10	SP-IND	18.35	16	10.35	32	8.43	12	8.91
11	C29	18.1	33	9.14	37	7.85	28	7.52
12	C25	18.09	10	11.36	17	9.65	8	8.99
13	E38	18.08	21	10.1	10	10.95	7	9.03
14	C42	17.72	23	10.07	39	7.53	35	7.19
15	E40	17.64	36	8.94	34	8.28	30	7.39
16	C31	17.6	51	6.42	46	6.83	N/A	
17	E93	17.54	18	10.24	53	5.37	N/A	
18	E21	17.13	12	11.16	28	8.69	21	7.91
19	SP500	17.13	26	9.89	29	8.67	11	8.93
20	C8	17.11	30	9.42	43	7.01	N/A	
21	E8	16.22	19	10.19	22	9.08	26	7.65
22	E56	16.04	35	8.95	41	7.39	27	7.59
23	E45	15.75	14	10.62	9	11.1	9	8.98
24	E1	15.58	29	9.5	30	8.67	41	6.38
25	E57	15.45	32	9.2	23	9.04	13	8.86
26	C54	15.32	2	17.28	4	12.07	2	10.18
27	E46	14.86	24	9.99	40	7.41	18	8.22
28	E33	14.82	11	11.32	47	6.79	24	7.75
29	C15	14.75	20	10.1	16	9.83	38	6.92
30	C22	14.03	28	9.52	31	8.5	39	6.72
31	C82	13.81	27	9.74	27	8.71	43	6.3
32	E29	13.57	39	8.56	20	9.14	44	6.21
33	C7	13.05	44	7.69	50	6.19	47	4.1
34	E27	13.01	45	7.68	48	6.59	29	7.43
35	E63	12.98	25	9.92	45	6.84	32	7.32
36	E96	12.95	41	8.14	21	9.12	N/A	
37	C2	12.87	38	8.67	35	8	25	7.68
38	C60	12.17	17	10.35	26	8.79	10	8.98
39	E17	12.16	47	7.17	33	8.43	15	8.55
40	C55	11.88	34	9.13	18	9.57	5	9.25
41	E61	11.8	15	10.38	5	11.74	N/A	
42	E72	11.55	40	8.16	24	8.97	23	7.78
43	E6	11.52	48	7.15	51	5.94	22	7.87
44	C72	10.63	42	8.11	12	10.41	3	9.82
45	C96	10.41	22	10.09	13	10.21	N/A	
46	C9	10.1	49	6.88	44	6.88	31	7.36
47	E47	9.98	N/A		N/A		N/A	
48	E31	9.85	43	7.76	14	10.21	N/A	
49	C56	9.82	37	8.82	19	9.52	17	8.22
50	D-JONES	9.45	57	3.98	56	4.98	36	7.15

INVESTMENT POOLS OVER $50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
51	E18	9.43 %	46	7.58 %	54	5.28 %	33	7.3 %
52	C27	8.82	13	10.69	8	11.49	16	8.41
53	E35	8.25	50	6.73	57	4.76	42	6.3
54	C59	7.82	N/A		N/A		N/A	
55	E90	7.44	54	5.97	42	7.04	N/A	
56	E100	7.12	55	5.72	N/A		N/A	
57	E73	7.08	52	6.2	38	7.76	37	7.02
58	C61	5.63	N/A		N/A		N/A	
59	E69	4.49	56	4.19	58	0	46	5.25
60	E28	1.88	53	6.16	52	5.73	45	5.87
61	C68	1.55	N/A		N/A		N/A	
62	COM-FDBD	0.3	58	3.87	N/A		N/A	
63	LEH-KUHN	-2.16	59	1.53	49	6.25	N/A	
64	SALOMON	-3.66	60	0.61	55	5.15	40	6.63
TOTAL POOLS (AVERAGE RETURN)								
57		14.27%	53	9.58%	52	8.59%	43	7.84%

INVESTMENT POOLS $10-$50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
48	C34	11.5 %	33	9.67%	60	6.89 %	33	7.55 %
49	C1	11.44	58	7.1	30	8.78	N/A	
50	E15	11.36	67	6.57	59	6.99	51	6.5
51	E32	11.2	65	6.79	34	8.66	37	7.18
52	C94	11.16	18	11.04	16	10.85	N/A	
53	E16	10.95	49	8.26	44	7.81	28	7.8
54	E85	10.83	53	7.98	28	8.88	N/A	
55	E75	10.71	61	6.88	2	14.44	5	10.78
56	C99	10.5	11	13.95	1	17.05	1	29.49
57	C6	10.42	60	6.94	63	6.51	57	5.97
58	C67	10.34	56	7.49	27	8.89	N/A	
59	E71	10.12	63	6.81	52	7.46	31	7.58
60	C21	10.03	78	4.29	81	4.11	60	4.95
61	E95	10	64	6.8	69	6.03	61	4.86
62	C32	9.71	75	5.15	45	7.77	38	7.17
63	E78	9.62	70	5.94	37	8.27	23	8.25
64	C5	9.52	54	7.7	57	7.15	48	6.84
65	D-JONES	9.45	80	3.98	77	4.98	39	7.15
66	C26	9.35	52	7.99	41	8.02	27	7.92
67	C16	9.34	73	5.77	66	6.24	55	6.2
68	E55	9.24	N/A		N/A		N/A	
69	E67	9.2	62	6.82	38	8.27	26	8.05
70	C70	8.84	69	6.37	49	7.68	36	7.2
71	C79	8.58	71	5.8	56	7.17	N/A	
72	C83	8.49	40	8.53	62	6.79	N/A	
73	E2	8.45	41	8.5	46	7.77	46	6.9
74	E14	8.27	66	6.58	48	7.72	45	6.96
75	C76	8.12	74	5.49	72	5.6	10	9.32
76	E10	7.92	68	6.46	78	4.96	53	6.22
77	C3	7.5	77	4.67	70	5.98	43	7.02
78	C38	6.38	55	7.67	47	7.74	29	7.66
79	C84	6.37	76	4.79	73	5.6	18	8.65
80	C74	6.05	21	10.57	29	8.85	32	7.57
81	E4	5.47	59	6.99	74	5.42	54	6.21
82	C47	4.98	85	3.73	71	5.81	35	7.26
83	E24	4.68	72	5.78	32	8.7	N/A	
84	C19	3.76	81	3.96	64	6.51	N/A	
85	C89	3.49	79	4.25	68	6.22	N/A	
86	E22	3.22	83	3.86	50	7.61	24	8.21
87	C90	3.02	N/A		N/A		N/A	
88	C49	1.96	84	3.76	75	5.18	59	4.95
89	C71	1.04	86	3.28	82	3.14	63	4.27
90	COM-FDBD	0.3	82	3.87	N/A		N/A	
91	LEH-KUHN	-2.16	87	1.53	65	6.25	N/A	
92	SALOMON	-3.66	88	0.61	76	5.15	50	6.63
	TOTAL POOLS (AVERAGE RETURN)							
85		12.66%	81	8.97%	76	8.56%	59	8.06%

INVESTMENT POOLS $10-$50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E94	27.02 %	3	17.01 %	N/A	%	N/A	%
2	C14	27.78	8	14.97	N/A		N/A	
3	E25	25.68	6	15.25	8	12.54	7	9.68
4	E54	24.79	2	17.2	4	13.16	14	9.01
5	E99	24.21	5	16.22	3	14	N/A	
6	C63	23.42	4	16.44	6	12.8	6	9.9
7	COM-FDEQ	22.78	1	17.45	14	11.72	N/A	
8	C66	21.49	14	12.7	17	10.84	N/A	
9	E26	20.13	9	14.33	11	11.85	20	8.43
10	E86	19.13	N/A		N/A		N/A	
11	C4	19.05	23	10.36	13	11.73	N/A	
12	SP-IND	18.35	24	10.35	35	8.43	16	8.91
13	C28	18.18	13	13.15	20	10.16	N/A	
14	C45	17.99	N/A		N/A		N/A	
15	E49	17.93	17	11.32	22	9.93	44	6.98
16	C48	17.79	29	9.89	26	8.96	N/A	
17	C35	17.64	7	15	5	13.09	N/A	
18	SP500	17.13	30	9.89	33	8.67	15	8.93
19	E53	17.01	20	10.74	18	10.82	11	9.24
20	E43	16.91	10	14.17	9	12.44	4	10.92
21	E37	16.47	25	10.3	21	10.09	41	7.05
22	E42	16.42	32	9.72	N/A		N/A	
23	E81	16.35	57	7.37	53	7.43	47	6.87
24	C57	16.17	43	8.44	79	4.91	62	4.35
25	C39	15.64	38	9.16	43	7.81	19	8.5
26	C98	15.55	12	13.86	7	12.68	2	12.78
27	C24	15.46	22	10.43	15	11.57	N/A	
28	E79	15.24	31	9.83	40	8.06	22	8.33
29	E50	15.01	27	10.1	61	6.87	58	5.57
30	E59	14.96	42	8.49	31	8.75	40	7.11
31	E20	14.82	44	8.42	36	8.41	13	9.1
32	E52	14.71	51	7.99	55	7.28	42	7.02
33	C93	14.46	48	8.28	N/A		N/A	
34	E68	14.29	37	9.26	51	7.53	34	7.32
35	C13	14.26	19	10.81	23	9.6	17	8.67
36	E3	14.17	35	9.57	42	7.84	21	8.34
37	E70	13.89	36	9.56	N/A		N/A	
38	E80	13.68	15	11.84	19	10.38	25	8.15
39	C18	13.49	28	10.01	12	11.8	3	11.78
40	E51	13.05	16	11.72	39	8.07	9	9.43
41	C65	13.04	39	8.85	25	9.17	8	9.48
42	E65	12.77	46	8.3	24	9.2	30	7.63
43	E98	12.33	34	9.64	54	7.34	52	6.3
44	C41	12.27	26	10.25	10	12.08	12	9.11
45	C58	12.14	50	8.25	67	6.23	49	6.79
46	C17	11.93	45	8.35	58	7.12	56	6.08
47	E66	11.83	47	8.29	80	4.81	N/A	

INVESTMENT POOLS UNDER $10 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	COM-FDEO	22.78%	1	17.45 %	1	11.72%	N/A	%
2	E12	19.51	4	10.67	N/A		N/A	
3	C40	18.67	7	10.26	2	11.62	1	12.1
4	SP-IND	18.35	6	10.35	10	8.43	5	8.91
5	C80	17.49	16	8.22	28	7.02	25	5.93
6	SP500	17.13	8	9.89	7	8.67	4	8.93
7	C87	16.79	3	11.06	25	7.13	7	7.68
8	C53	15.46	5	10.43	N/A		N/A	
9	E76	15.21	15	8.35	34	6.59	N/A	
10	E92	13.13	25	6.92	5	9.56	2	9.67
11	C51	12.98	10	9.1	11	8.25	N/A	
12	C44	12.65	2	12.03	4	10.63	16	6.83
13	C85	12.4	9	9.63	3	10.85	8	7.64
14	C95	12.38	17	8.21	15	7.78	N/A	
15	E91	11.8	13	8.47	24	7.27	11	7.46
16	C92	11.79	12	8.55	8	8.5	N/A	
17	C43	11.77	23	7.21	13	7.97	N/A	
18	C73	11.36	28	6.31	N/A		N/A	
19	E62	10.6	18	8.07	18	7.49	9	7.56
20	C88	10.5	19	7.53	32	6.81	N/A	
21	C86	10.46	14	8.39	6	9.36	3	8.93
22	C75	9.79	20	7.32	9	8.49	12	7.36
23	E60	9.71	30	6.05	31	6.84	19	6.55
24	E74	9.69	21	7.23	27	7.03	N/A	
25	D-JONES	9.45	49	3.98	50	4.98	13	7.15
26	E39	9.31	27	6.57	19	7.47	27	4.97
27	E44	9.19	39	5.3	48	5.09	10	7.49
28	E77	9.17	22	7.23	17	7.64	N/A	
29	C50	8.93	24	6.93	38	6.18	14	7.14
30	E64	8.87	11	8.9	20	7.46	28	4.61
31	C30	8.72	29	6.15	16	7.7	22	6.29
32	C36	8.66	31	6.01	42	5.79	N/A	
33	C97	8.47	N/A		N/A		N/A	
34	E83	8.44	34	5.87	30	6.96	N/A	
35	C46	8.39	33	5.96	29	6.97	N/A	
36	E84	8.16	42	4.72	33	6.69	N/A	
37	C11	7.89	N/A		N/A		N/A	
38	E82	7.78	32	6	21	7.46	N/A	
39	C20	7.6	38	5.35	53	3.16	26	5.52
40	C78	7.57	35	5.85	49	5	29	3.92
41	C62	7.54	37	5.52	14	7.94	N/A	
42	C52	6.93	26	6.74	22	7.43	15	7.08
43	E41	6.85	45	4.52	35	6.35	N/A	
44	C64	6.77	40	4.91	26	7.03	6	7.95
45	C37	6.36	44	4.61	43	5.74	N/A	

INVESTMENT POOLS UNDER $10 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
46	C12	6.08%	51	3.76 %	40	5.98 %	N/A	%
47	C23	6.05	41	4.89	37	6.24	21	6.3
48	E48	5.87	43	4.71	51	4.25	N/A	
49	E58	5.71	N/A		N/A		N/A	
50	E97	5.08	48	4	23	7.35	24	6.1
51	E7	3.25	46	4.38	52	3.3	N/A	
52	C10	2.64	36	5.58	46	5.25	N/A	
53	E13	2.49	52	3.67	45	5.36	18	6.58
54	C33	2.23	55	2.9	N/A		N/A	
55	E23	2.01	47	4.35	44	5.72	23	6.14
56	E87	1.78	56	2.57	12	8	20	6.54
57	C69	0.38	53	3.59	39	6.06	N/A	
58	COM-FDBD	0.3	50	3.87	N/A		N/A	
59	E88	-1.51	58	1.76	41	5.97	N/A	
60	E9	-1.92	54	3.3	N/A		N/A	
61	LEH-KUHN	-2.16	59	1.53	36	6.25	N/A	
62	SALOMON	-3.66	60	0.61	47	5.15	17	6.63
63	C91	-6.42	57	2.01	54	1.43	N/A	
TOTAL POOL (AVERAGE RETURN)								
56		8.38%	53	6.39%	48	6.92%	25	6.97%

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	5 YEAR EFFICIENCY	#	10 YEAR EFFICIENCY	#	5 YEAR BETA	#	10 YEAR BETA
1	C98	1.89%	1	1.15%	161	0.13%	129	0.22%
2	C99	1.31	2	1.06	164	0.07	130	0.04
3	C35	1.09	N/A		104	0.41	N/A	
4	C41	0.94	22	0.19	132	0.31	69	0.72
5	E99	0.93	N/A		44	0.67	N/A	
6	C94	0.9	N/A		178	-0.29	N/A	
7	C44	0.8	71	0.04	160	0.13	72	0.7
8	C24	0.75	N/A		79	0.52	N/A	
9	E80	0.74	45	0.1	120	0.35	32	0.83
10	C63	0.73	15	0.21	36	0.69	2	1.13
11	E54	0.73	27	0.17	26	0.76	15	0.94
12	E61	0.71	N/A		78	0.53	N/A	
13	C85	0.7	56	0.07	150	0.22	95	0.62
14	C18	0.67	4	0.41	173	0	70	0.71
15	C77	0.63	5	0.39	6	1.08	13	0.96
16	E25	0.63	16	0.21	23	0.81	16	0.92
17	E19	0.62	32	0.15	17	0.87	25	0.88
18	C27	0.56	35	0.13	148	0.23	99	0.58
19	E53	0.54	18	0.21	49	0.64	67	0.73
20	C86	0.53	17	0.21	156	0.16	115	0.49
21	C54	0.53	8	0.32	72	0.54	109	0.54
22	C4	0.52	N/A		18	0.87	N/A	
23	E38	0.49	21	0.19	42	0.67	77	0.69
24	E43	0.49	6	0.33	3	1.17	48	0.79
25	E45	0.49	28	0.17	32	0.71	36	0.82
26	E75	0.48	9	0.26	7	1.03	4	1.04
27	E26	0.46	37	0.13	10	1	5	1.02
28	C55	0.46	12	0.25	115	0.37	106	0.54
29	E5	0.45	26	0.17	13	0.94	1	1.18
30	E31	0.43	N/A		122	0.34	N/A	
31	C66	0.43	N/A		22	0.82	N/A	
32	C13	0.41	14	0.22	99	0.43	127	0.29
33	C72	0.4	7	0.33	73	0.54	116	0.48
34	C28	0.38	N/A		77	0.53	N/A	
35	C56	0.36	43	0.11	105	0.4	29	0.85
36	C15	0.36	83	0.02	59	0.57	33	0.83
37	E89	0.35	N/A		1	1.5	N/A	
38	E65	0.35	59	0.06	151	0.2	47	0.8
39	C40	0.35	3	0.45	2	1.42	97	0.6
40	E49	0.34	78	0.02	66	0.55	28	0.85
41	C96	0.33	N/A		56	0.59	N/A	
42	E11	0.33	23	0.19	31	0.71	8	1
43	E34	0.32	75	0.03	8	1.03	71	0.7
44	E37	0.3	101	-0.04	16	0.87	126	0.3
45	C65	0.28	11	0.25	100	0.43	98	0.59

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	5 YEAR EFFICIENCY	#	10 YEAR EFFICIENCY	#	5 YEAR BETA	#	10 YEAR BETA
49	C25	0.22 %	19	0.2 %	11	0.98 %	110	0.54 %
50	E72	0.2	53	0.07	101	0.43	68	0.73
51	E8	0.2	57	0.06	61	0.57	37	0.82
52	C67	0.18	N/A		137	0.28	N/A	
53	E57	0.17	29	0.17	37	0.69	49	0.79
54	C60	0.15	20	0.2	102	0.42	93	0.62
55	E85	0.15	N/A		49	0.55	N/A	
56	C1	0.14	N/A		108	0.38	N/A	
57	C48	0.14	N/A		19	0.84	N/A	
58	E59	0.12	82	0.02	64	0.56	56	0.76
59	C74	0.12	79	0.02	138	0.28	131	-0.04
60	E32	0.12	81	0.02	174	-0.02	74	0.69
61	E24	0.12	N/A		169	0.03	N/A	
62	C82	0.12	94	-0.01	58	0.58	6	1.02
63	E36	0.11	44	0.11	57	0.59	55	0.77
64	E1	0.11	97	-0.02	75	0.53	24	0.88
65	E21	0.1	48	0.08	39	0.68	57	0.76
66	C92	0.09	N/A		131	0.31	N/A	
67	SP500	0.09	30	0.16	9	1	9	1
68	C22	0.07	103	-0.05	70	0.54	102	0.56
69	C75	0.07	65	0.05	89	0.48	27	0.86
70	SP-IND	0.06	31	0.16	5	1.11	7	1.01
71	E17	0.05	33	0.15	76	0.53	89	0.64
72	E20	0.05	24	0.19	29	0.74	44	0.8
73	E40	0.03	72	0.04	15	0.88	42	0.81
74	E78	0.02	41	0.11	126	0.33	60	0.75
75	E67	0.01	47	0.1	113	0.38	75	0.69
76	C51	0.01	N/A		63	0.56	N/A	
77	E87	0	108	-0.06	179	-0.35	120	0.41
78	E51	-0.01	13	0.23	67	0.55	79	0.68
79	E30	-0.01	46	0.1	24	0.78	19	0.9
80	E79	-0.02	39	0.12	53	0.62	61	0.74
81	C2	-0.04	61	0.06	45	0.66	118	0.48
82	C29	-0.04	67	0.05	21	0.83	59	0.76
83	E14	-0.06	90	-0.01	43	0.67	78	0.68
84	C43	-0.06	N/A		133	0.31	N/A	
85	C39	-0.07	36	0.13	34	0.7	30	0.85
86	C62	-0.08	N/A		155	0.18	N/A	
87	C26	-0.08	50	0.08	114	0.37	90	0.62
88	C32	-0.09	91	-0.01	109	0.38	112	0.53
89	E46	-0.09	40	0.11	14	0.94	34	0.83
90	E3	-0.09	38	0.12	90	0.47	82	0.67
91	C42	-0.1	76	0.03	25	0.77	31	0.85
92	C30	-0.11	109	-0.07	87	0.48	105	0.55

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	5 YEAR EFFICIENCY	#	10 YEAR EFFICIENCY	#	5 YEAR BETA	#	10 YEAR BETA
93	E22	-0.11%	42	0.11%	171	0.02 %	94	0.62 %
94	E2	-0.11	88	0	98	0.43	51	0.78
95	E81	-0.12	85	0.02	41	0.68	12	0.97
96	E74	-0.12	N/A		12	0.96	N/A	
97	C95	-0.13	N/A		121	0.35	N/A	
98	E64	-0.14	116	-0.1	167	0.04	63	0.73
99	E16	-0.14	54	0.07	125	0.33	73	0.7
100	E77	-0.14	N/A		123	0.34	N/A	
101	E56	-0.15	63	0.05	40	0.68	62	0.74
102	E97	-0.15	118	-0.12	129	0.32	100	0.57
103	E73	-0.15	93	-0.01	142	0.26	88	0.64
104	E52	-0.16	86	0.01	46	0.66	38	0.82
105	E98	-0.16	113	-0.08	65	0.55	81	0.67
106	E71	-0.16	64	0.05	81	0.51	64	0.73
107	E68	-0.17	70	0.04	91	0.47	14	0.94
108	E15	-0.17	102	-0.05	47	0.66	87	0.65
109	C87	-0.18	52	0.08	139	0.27	3	1.04
110	C80	-0.18	115	-0.1	27	0.76	66	0.73
111	E33	-0.18	55	0.07	33	0.7	45	0.8
112	C31	-0.19	N/A		84	0.5	N/A	
113	C8	-0.19	N/A		51	0.63	N/A	
114	E91	-0.19	62	0.06	50	0.63	10	0.99
115	C52	-0.22	95	-0.02	112	0.38	101	0.57
116	E39	-0.24	127	-0.28	117	0.36	114	0.49
117	C70	-0.26	98	-0.03	159	0.15	121	0.41
118	E50	-0.26	107	-0.06	97	0.43	18	0.91
119	E63	-0.27	73	0.04	82	0.51	54	0.77
120	E62	-0.27	69	0.05	127	0.33	84	0.66
121	LEH-KUHN	-0.28	N/A		176	-0.2	N/A	
122	C38	-0.28	68	0.05	175	-0.08	122	0.4
123	E27	-0.3	66	0.05	38	0.68	26	0.88
124	C34	-0.31	58	0.06	95	0.45	21	0.9
125	E76	-0.31	N/A		54	0.62	N/A	
126	D-JONES	-0.31	80	0.02	4	1.13	39	0.82
127	C58	-0.35	89	0	35	0.7	40	0.81
128	E93	-0.36	N/A		30	0.73	N/A	
129	E88	-0.36	N/A		180	-0.37	N/A	
130	C79	-0.37	N/A		145	0.24	N/A	
131	E84	-0.38	N/A		116	0.37	N/A	
132	E82	-0.38	N/A		162	0.1	N/A	
133	E90	-0.38	N/A		143	0.24	N/A	
134	C64	-0.39	49	0.08	158	0.15	92	0.62
135	C9	-0.4	84	0.02	93	0.46	96	0.61
136	C17	-0.4	117	-0.11	130	0.32	91	0.62
137	E6	-0.4	51	0.08	28	0.75	80	0.67
138	SALOMON	-0.43	112	-0.07	177	-0.25	123	0.37
139	E60	-0.43	96	-0.02	119	0.35	43	0.81
140	E23	-0.46	104	-0.05	110	0.38	46	0.8

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1980

#	CODE NAME	5 YEAR EFFICIENCY	#	10 YEAR EFFICIENCY	#	5 YEAR BETA	#	10 YEAR BETA
141	C57	-0.47 %	124	-0.19 %	80	0.51 %	108	0.54 %
142	C19	-0.47	N/A		166	0.06	N/A	
143	E41	-0.48	N/A		134	0.3	N/A	
144	C50	-0.49	87	0	71	0.54	76	0.69
145	C3	-0.49	92	-0.01	85	0.5	86	0.65
146	C47	-0.49	77	0.03	103	0.42	53	0.77
147	C12	-0.52	N/A		128	0.32	N/A	
148	C69	-0.52	N/A		172	0.01	N/A	
149	E44	-0.52	60	0.06	52	0.63	17	0.92
150	C83	-0.53	N/A		146	0.24	N/A	
151	C16	-0.53	111	-0.07	88	0.48	65	0.73
152	E18	-0.54	74	0.03	48	0.65	41	0.81
153	C7	-0.56	128	-0.31	106	0.39	124	0.34
154	E28	-0.57	120	-0.15	168	0.04	111	0.53
155	C23	-0.57	119	-0.12	124	0.34	107	0.54
156	E83	-0.58	N/A		170	0.03	N/A	
157	E66	-0.58	N/A		62	0.56	N/A	
158	C6	-0.58	121	-0.16	118	0.36	104	0.55
159	C88	-0.58	N/A		140	0.27	N/A	
160	C46	-0.62	N/A		157	0.16	N/A	
161	C36	-0.63	N/A		83	0.51	N/A	
162	C5	-0.64	122	-0.17	149	0.22	128	0.25
163	E4	-0.68	106	-0.06	111	0.38	52	0.77
164	C89	-0.7	N/A		165	0.07	N/A	
165	E95	-0.71	129	-0.31	107	0.39	117	0.48
166	C37	-0.77	N/A		144	0.24	N/A	
167	E13	-0.8	114	-0.1	153	0.18	119	0.46
168	E10	-0.81	100	-0.03	86	0.49	20	0.9
169	E7	-0.87	N/A		60	0.57	N/A	
170	E48	-0.89	N/A		74	0.54	N/A	
171	C21	-0.9	123	-0.18	55	0.59	50	0.78
172	C49	-0.9	126	-0.19	154	0.18	83	0.66
173	C84	-0.91	34	0.13	136	0.29	11	0.99
174	E69	-0.98	110	-0.07	20	0.83	35	0.83
175	C76	-1.01	25	0.18	135	0.3	22	0.9
176	C20	-1.03	125	-0.19	94	0.45	103	0.55
177	C78	-1.07	130	-0.39	141	0.27	113	0.52
178	C91	-1.13	N/A		181	-0.38	N/A	
179	C10	-1.26	N/A		163	0.09	N/A	
180	E35	-1.27	105	-0.05	147	0.24	58	0.76
181	C71	-1.74	131	-0.48	152	0.2	125	0.33
TOTAL POOL (AVERAGE RETURN)								
176		-0.07%	127	0.06%	176	0.47%	127	0.70%

EQUITY ONLY AND BOND ONLY PERFORMANCE COMPARISON FOR THE THREE-YEAR PERIOD ENDING JUNE 30, 1980

	Code Name	Total Return
1	COM-FDEQ	17.45%
2	EQUITY 5	14.59
3	EQUITY 13	13.01
4	EQUITY 1	12.21
5	EQUITY 9	12.15
6	EQUITY 7	11.87
7	EQUITY 29	11.66
8	SP-IND	10.35
9	EQUITY 8	10.24
10	SP500	9.89
11	EQUITY 19	9.52
12	EQUITY 15	9.32
13	EQUITY 27	8.58
14	EQUITY 18	8.54
15	EQUITY 21	8.33
16	EQUITY 20	7.41
17	EQUITY 23	7.11
18	EQUITY 28	7.1
19	EQUITY 24	6.93
20	EQUITY 17	6.71
21	EQUITY 14	6.46
22	EQUITY 3	6.17
23	EQUITY 26	4.15
24	D-JONES	3.98
25	COM-FDBD	3.87
26	EQUITY 11	3.37
27	LEH-KUHN	1.53
28	SALOMON	0.61
29	EQUITY 2	0.22
AVERAGE OF 22 POOLS		8.44

Code Name	Total Return
1 COM-FDEQ	17.45%
2 SP-IND	10.35
3 SP500	9.89
4 BOND 21	7.49
5 BOND 19	6.08
6 BOND 14	5.82
7 BOND 18	5.06
8 BOND 9	4.32
9 BOND 8	4.27
10 BOND 4	4.27
11 BOND 5	4.18
12 D-JONES	3.98
13 COM-FDBD	3.87
14 BOND 20	3.84
15 BOND 16	2.92
16 BOND 12	2
17 LEH-KUHN	1.53
18 BOND 1	1.16
19 SALOMON	0.61
20 BOND 15	0.04
21 BOND 6	-0.51
22 BOND 17	-9.46
AVERAGE OF 15 POOLS	2.77

EQUITY ONLY AND BOND ONLY PERFORMANCE COMPARISON
FOR THE FIVE-YEAR PERIOD ENDING JUNE 30, 1980

	Code Name	Total Return
1	COM-FDBQ	11.72%
2	EQUITY 19	11.38
3	EQUITY 13	10.61
4	EQUITY 9	10.57
5	EQUITY 8	10.31
6	EQUITY 3	9.28
7	SP500	8.67
8	EQUITY 17	8.52
9	SP-IND	8.43
10	EQUITY 29	7.86
11	EQUITY 24	7.63
12	EQUITY 7	7.46
13	EQUITY 20	7.25
14	EQUITY 14	6.75
15	EQUITY 5	6.52
16	LEH-KUHN	6.25
17	EQUITY 28	6.01
18	EQUITY 18	5.97
19	EQUITY 15	5.84
20	SALOMON	5.15
21	D-JONES	4.98
22	EQUITY 11	4.89
23	EQUITY 1	4.73
AVERAGE OF 17 POOLS		7.74

	Code Name	Total Return
1	COM-FDBQ	11.72%
2	BOND 21	9.5
3	SP500	8.67
4	SP-IND	8.43
5	BOND 4	7.41
6	BOND 8	6.92
7	BOND 5	6.71
8	BOND 20	6.65
9	BOND 9	6.55
10	LEH-KUHN	6.25
11	BOND 15	6.23
12	BOND 6	5.7
13	SALOMON	5.15
14	D-JONES	4.98
15	BOND 17	3.17
AVERAGE OF 9 POOLS		6.54

EXHIBIT IV

INSTITUTIONS WHICH APPLY TOTAL RETURN FOR BUDGETING PURPOSES

Institution	1979-80 Spending Rate Formula	Spending Rate Formula Change From Prior Year
The Academy of the New Church	4½% increase in income over the previous year. If not earned taken from appreciation.	No Change
Alfred University	6% of 3 year moving average of market value.	No Change
Berea College	Increase spending over prior year by 5%.	No Change
Boston University	5% based on a 5-year moving average.	No Change
Bowdoin College	5% of a 5-year moving average of market value	No Change
Bryn Mawr College	5% of a 3-year moving average	No Change
California Institute	5% of market value of the pooled endowment portfolio averaged over a prior 3-year period.	No Change
Carleton College	6% of the 5-year average market value of endowment assets computed quarterly set back one year.	No Change
Carnegie-Mellon Univ.	Not directly-but ceiling placed on total budget support from endowment.	No Change
Carroll College	6% of the average 3-year end market values after adjusting for subsequent principal additions or withdrawals.	No Change
Claremont Men's College	6% of 3-year adjusted average market value.	No Change
Clark University	5% of a 20-quarter moving average.	3 year to 5 year base

College of Wooster	7% of 12-quarter average market value of total return portfolios.	Change 6.0% to 7.0% in 1980
Teachers College-Columbia University	N/A	N/A
Cooper Union	Assumption of a longer term combined total return of 9% and use of 4% for operations.	No Change
Cornell College	5.5% of June 30 market value	No Change
Dartmouth College	5.0% of a 3-year quarterly average of market value and net additions, set back one year.	Spend a specific amount increased by trustee vote over prior year.
Davidson College	5% of prior 3-year average market value.	No Change
Doane College	5% of the average market value on June 30 of the last three years with a minimum guarantee.	No Change
Duke University	Spending rate tied to a formula, with 4% of the market objective added to current funds quasi income, if income insufficient the balance taken from realized gain.	No Change
Earlham College	5% of 12 quarter moving average set back 2 quarters.	Began fiscal 1979
Eastern Michigan Univ.	N/A	N/A
Franklin and Marshall College	.0525 per share income distribution	No Change
Haverford College	5% of 5-year average market value.	No Change
Johns Hopkins University	Try to keep total spending in a range not exceeding 6% of market value for several trailing periods of time.	No Change
Kenyon College	5% of market value calculated at beginning of fiscal year.	No Change

Marquette University	Withdraw an amount equal to 5% of a 3-year moving average of the total market value at June 30 for the latest three fiscal years, plus current year additions on a time-weighted basis.	No Change
Oberlin College	5.4% of 36 month average market value, set back 6 months.	Moving to objective of spending 4.5%
Occidental College	5% of 3 year moving average	No Change
Ohio Wesleyan University	N/A	N/A
Pomona College	5.5% of 12 quarter average of market value.	No Change
Pratt Institute	5% of market value.	No Change
Princeton University	6% increase in net income per unit.	No Change
Reed College	5% of 13-quarter average moving unit value.	No Change
Rhode Island School of	5% of moving 3-year market value lagged 1 year.	No Change
Smith College	5% of the average market value of 12 quarters ending March 31, preceeding the start of the next June 30 fiscal year.	No Change
Spelman College	5% of the average value of the endowment over 12 quarters, but a minimum contribution.	No Change
Stanford University	Target rate of 4.75%, but spending above or below this rate permitted, 1979-80 payout was 4.6% of market value on 8/31/79.	Prior to 1978-79 payout was 5% of a 36 month moving market average.
State University of New York at Binghamton	N/A	N/A
Syracuse University	N/A	N/A

University of Chicago	5.0% of moving average market values of six of the last 10 years (adj. for gifts) ending prior to the start of the fiscal year with 2 highest and the 2 lowest years excluded from the average.	No Change
University of Maryland	Lesser of dividends and interest received or 5% of 5 year rolling market value.	No Change
University of Miami	6% of prior 3 years average market value and 5% in subsequent years.	6% was 5% previously
University of Pennsylvania	6.7% of 3 year moving average, set back 1 year.	No Change
University of Richmond	5% of 3 year moving average of market value.	Adopted Total Return in 1980
University of Wisconsin Foundation	N/A	N/A
Vanderbilt University	5.5% of 5 year average market value.	No Change
Wesleyan University	Board approves a dollar reliance figure for support of operations and capital expenditures.	No Change
Williams College	Increase amount spendable by 6% over prior year.	No Change
Yale University	4.5% of five-year moving average.	No Change

13 Institutions Which Abandoned Total Return Concept

1) Case Western Reserve University
2) Colby College
3) Cornell University
4) Kalamazoo College
5) Northwestern University
6) Rensselaer Polytechnic Institute
7) Rochester Institute of Technology
8) Swarthmore College
9) Trinity College (Washington)
10) University of Vermont
11) University of Wisconsin
12) Wake Forest University
13) Washington University

EXHIBIT V

INDEX OF INVESTMENT MANAGERS (1)

Institution	Investment Managers
Academy of the New Church	Pitcairn Incorporated (S,B)
Agnes Scott College	Trust Company Bank, Atlanta (S,B)
Albion College	Trust Dept Nat'l Bank Detroit (S,B) Stein, Roe * Granham (S,B)
Alfred University	BEA Associates, Inc. (S,B) Reich & Tang, Inc. (S,B)
Allegheny College	Standish, Ayer & Wood, Inc. (S,B)
Alma College (2)	Mitchell Hutchins, Inc. (S)
The American University	American Security Bank (S,B) Drexel Burnham Lambert (S)
Amherst College	Miller, Anderson & Sherrerd (S) Grantham, Mayo, Van Otterloo & Co., Inc. (S) Fiduciary Trust Company of N.Y. (B)
Arizona State University	Northern Trust Co. of Arizona (S,B)
Baldwin-Wallace College	Internally Managed
Baylor College of Medicine	Internally Manager Baptist Fdn of Texas (S,B) Fayez Sarofim & Co. (S,B)
Berea College	David L. Babson & Co. (S) Century Capital Associates (S) Delaware Invesment Advisors (S) Harris Bank of Chicago (B)
Berry College	Trust Company of Georgia (S,B)
Boston College	Standish, Ayer & Wood, Inc. (B) Essex Investment Management Co., Inc. (S)
Bowdoin College	Manufacturers Hanover Trust Co. (S,B) James E. Murray & Co., Inc. (S,B)
Brandeis University	Brundage, Story & Rose (S,B) New Court Capital Management (S,B) Julian Lerner (S,B) Lehman Brothers Kuhn Loeb (S) Leon Theyers (S)

Bryn Mawr College	David L. Babson (S,B) J&W Seligman (S,B)
Bucknell University	Internally Managed
California Inst. of Tech.	Fayez Sarofim (S,B) Boston Co. of Southern Calif. (S,B) IDS Advisory (S,B) Endowment Management & Research (S,B)
Carleton College	Northwestern National Bank of Minneapolis (S,B) Alliance Capital Management (S,B) Endowment Management & Research (S,B) The St. Paul Companies (S,B) Essex Investment Management Co. (S,B)
Carnegie-Mellon University	Capital Guardian Trust Co. (S) Delaware Investment Advisors,Inc. (S) F. Eberstadt & Co. Inc. (S) Pittsburgh National Bank (S) Mellon Bank (S,B) Fischer, Francis, Trees & Watts Inc. (B) Equity Research Associates (S)
Carroll College	Marshall & Illsley Bank (S,B) First National Bank - Minneapolis (S,B)
Case Western Reserve Univ.	Central National Bank-Cleveland (S,B) American Trust (S,B) National City Bank of Cleveland (S,B)
Catholic University of America	MSD & TCO (S,B) Torray Clark (S,B)
Chapman College	Internally Managed
Claremont Men's College	Everett Harris & Co. (S,B) Cramblit & Carney (S,B) Mutual Fund Management (S)
Clark University	New Court Capital Management,Inc. (S,B) Essex Investment Management (S,B)
Clarkson College of Technology	Inverness Counsel Inc. (S,B)
Colby College	David L. Babson, Inc. (S,B)
College of Wooster	Woodbyne Corporation (S,B) Carnegie Capital Advisors (S) Fiduciary Trust Company (B) David J. Greene & Co. (S)

Colorado College	John W. Bristol & Co.,Inc. (S,B)
Columbia University	Internally Managed Beck, Mack, & Oliver (S)
Teachers College-Columbia Univ.	Fiduciary Trust & Company (S,B) Morgan Stanley (S) Connecticut Bank & Trust (B,S) Scudder, Stevens & Clark (B)
Cooper Union	Miller, Anderson & Sherrerd (S,B) Cooke & Bieler (S,B) United States Trust (S,B)
Cornell College	Fayez Sarofim & Company (S,B)
Cornell University	Internally Managed
Dartmouth College	State Street Research & Management (B) Delaware Investment Advisers (S) Pioneering Management Corp. (S) T. Rowe Price Associates (S)
Davidson College	Scudder Stevens & Clark (B) Fayez Sarofim & Company (S,B) Lexington Management Co. (S,B)
Denison University	MacKay Shields (S,B) National City Bank (S,B)
Dickinson College	American Bank & Trust Co. (S,B)
Doane College	Hartford National Bank (S,B) National Bank of Commerce (S,B) First National Bank (S,B)
Drake University	Harris Trust & Savings Bank-Chicago (S,B) Iowa Des Moines National Bank (B)
Drew University	Smith Barney, Harris Upham & Co (S,B) J & W Seligman (S,B)
Duke University	T. Rowe Price (S) Paine Webber Mitchell Hutchins (S,B)
Earlham College	Delaware Investment Advisers (S) Putnam Capital Companies (S,B) Stein Roe & Farnham (S,B)
Eastern Michigan University	First Michigan Corp. (S,B)

Emory University	Internally Managed Trust Company of Georgia (S,B)
Furman University	Thorndike, Doran,Paine & Lewis Inc. (S) Trevor, Stewart, Burton & Jacobsen Inc. (S)
Georgetown University	Chase Investors (S,B) Fayez Sarofim & Co. (S,B) Riggs National Bank (S,B)
George Washington University	David L. Babson & Co. (S,B)
Georgia Institute of Technology	Trust Company Bank Atlanta Georgia (S,B) First National Bank of Atlanta (S,B)
Grinnell College	Internally Managed Ruane, Cunniff & Company Inc. (S)
Hamilton College	Internally Managed
Hampton Institute	Smith Barney Harris Upham & Co (S,B)
Harvard University	Internally Managed Brown Brothers Harriman (B) Scudder Stevens & Clark (S) F. Eberstadt Corp. (S)
Haverford College	United States Trust (S,B) Fidelity Bank (S,B) J. W. Bristol (S)
Hendrix College	Scudder Stevens & Clark (S,B)
Hobart and William Smith Colleges	Security Trust of Rochester (S,B) Central Trust of Rochester (S,B)
Hollins College	First National Exchange Bank (S,B) Capitoline Investments (S,B)
Hope College	ISI Corp. (S,B) First Michigan Bank & Trust (B)
Indiana University	Indiana National Bank (S,B) American Fletcher National Bank (S,B) Merchants National Bank (S,B) State of Indiana (S,B)
Johns Hopkins University	Miller, Anderson & Sherrerd (S,B) Weiss Peck & Greer (S)
Kalamazoo College	Delaware Investment Advisers (S) Putnam Capital Management Inc. (S) The Fletcher Group (S)

Kenyon College	Bernstein McCaulay (S,B) Ameritrust Co. (S,B)
Lehigh University	Internally Managed
Loyola University of Chicago	Internally Managed
McGill University	Royal Trust Company (S,B) Beutel Goodman (S,B) Bolton Tremblay (S,B)
Marquette University	Heritage Investment Advisors Inc. (S,B) Marshall & Ilsley Bank (S,B)
Massachusetts Inst. of Tech.	Thorndike, Doran, Paine & Lewis, Inc. (S,B)
Medical College of Pennsylvania	Cooke & Bieler (S,B)
Mercer University	Internally Managed
Michigan State University	Scudder, Stevens & Clark (S,B) Detroit Bank & Trust Co. (S,B)
Middlebury College	Beck, Mack & Oliver (S,B) David L. Babson & Co. (S,B)
Mills College	Wentworth, Hauser & Violich (S,B)
Monmouth College	Central Jersey Bank & Trust (B,S)
Mt. Holyoke College	Scudder, Stevens & Clark (S,B)
Muhlenberg College	Scudder, Stevens & Clark (S,B) McGlinn & Associates (S,B)
Northwestern University	Internally Managed
Oakland University	Ann Arbor Trust Company (S,B)
Oberlin College	Capital Guardian Trust Company (S) Wertheim Asset Management Services (S,B) First National Bank of Atlanta (S,B) National City Bank of Cleveland (S,B)
Occidental College	Scudder, Stevens & Clark (S,B) Decatur Income Fund (S) Investment Company of America (S) Putnam Investors Fund (S)
Ohio Northern University	BancOhio Trust Department (S,B)

Ohio State University	Neuberger Corp. Mutual Fund (S) Huntington Investment Company (B) Tallasi Management (S) Siebel Capital Management (S) Chicago Corp. (S) National City Bank (B)
Ohio University	Andrecom Advisors, Inc. (S,B) Lehman Brothers (S,B)
Ohio Wesleyan University	Morgan Guaranty Trust (S,B)
Oregon State Board of Higher Ed.	Dodge & Cox (S,B)
Oregon State University Fdn.	Columbia Management Co. (S,B)
Pennsylvania State University	Mellon Bank (S,B)
Philadelphia College of Textiles and Sciences	Girard Bank (S,B) Philadelphia National Bank (S,B)
Pomona College	Loomis-Sayles (S,B) Belden Associates (S,B) Everett Harris (S,B)
Pratt Institute	Neuberger & Berman (S,B) William Wittier (S,B)
Princeton University	John Bristol & Co. (S) Vilas-Fisher Associates LTD (S) Capital Guardian Trust Co. (S) Scudder, Stevens & Clark (B)
Reed College	Internally Managed Schroder, Naess & Thomas (S,B)
Rensselaer Polytechnic Institute	Miller Anderson Sherrerd (S,B) Brundage, Story & Rose (S,B) Forstmann-Leff-Degnan (B)
Rhode Island School of Design	Endowment Management & Research Inc. (S,B) Essex Investment Management Co. (S,B) Beck, Mack & Oliver (S,B) Rhode Island Hospital Trust National Bank (S,B)
Rice University	Internally Managed
Rochester Institute of Technology	Lincoln First Bank of Rochester (S,B)
Rockefeller University	Internally Managed
Rutgers, The State University	Chemical Bank of New York (S,B)

St. Norbert College	(Externally Managed--Endowment Held Under Trust Agreements)
Simmons College	Harbor Capital Management Company (S,B)
Smith College	Morgan Guaranty Trust Co. of New York (S) Capital Guardian Trust Co. (S) Beck, Mack & Oliver (S)
Southern Methodist University	Fayez Sarofim & Company (S,B)
Spelman College	William D. Wittier Inc. (S,B) Weiss, Peck & Greer - New York (S,B)
Stanford University	Capital Guardian Trust Company (S,B)
State University of New York	Manufacturers & Traders Trust Co. (S,B) Marine Midland Bank (S,B)
Stephens College	E. F. Hutton (S,B)
Swarthmore College	John W. Bristol & Co. (S,B) Brundage, Story & Rose (S) Grantham, Mayo, Vanotterloo (S)
Sweet Briar College	Capitoline Investment Services (S,B)
Syracuse University	Internally Managed
Temple University	Cole, Yeager & Wood (S) T. Rowe Price Associates (S)
Thomas Jefferson University	Stratton Management Co. (S,B)
Trinity College (Hartford,Conn.)	Hartford National Bank & Trust Co. (S,B)
Trinity College (Wash., D.C.)	American Security Bank (S,B)
University of Akron	First National Bank of Akron (S,B) BancOhio (S,B)
University of Akron Development Fd.	BancOhio Akron Nat'l Bank (S,B) Goodyear Bank Pooled Income Fund (S,B)
University of Arizona	Internally Managed
University of Arkansas	Internally Managed First National Bank-Little Rock (S,B)
University of Chicago	Internally Managed

University of Cincinnati	Scudder, Stevens & Clark (S) Delaware Investment Advisers (S) Timothy E. Johnson Investment Counsel (S,B) Fifth Third Bank (S,B)
University of Connecticut	Internally Managed
University of Dayton	Boston Company Financial Strategies Inc. (S,B)
University of Delaware	Internally Managed Wilmington Trust Co. (S,B) Delaware Trust Co. (S,B) Bank of Delaware (S) Farmers Bank of State of Delaware (S,B)
University of Denver	Internally Managed United Bank of Denver (S,B) First National Bank of Denver (S,B) Colorado National Bank (S,B) Central Bank & Trust (S,B)
University of Evansville	Internally Managed
University of Illinois	First National Bank of Chicago Trust Department (S,B)
University of Maine	Loomis, Sayles & Co. (S,B)
University of Maryland	Thorndike, Doran, Paine & Lewis Inc. (S,B)
University of Miami	Invesco Capital Management (S,B) Southeast First National Bank of Miami (S,B) Morgan Guaranty Trust Co. (S,B)
University of Michigan	National Bank of Detroit (S,B)
University of Minnesota	First Trust Company of St. Paul (S,B) Investment Advisors, Inc. (S,B) Northwestern National Bank of Minneapolis (S,B) T. Rowe Price Associates (S,B) Thorndike,Doran,Paine & Lewis Inc. (S,B) Alliance Capital Management Corp. (S,B)
University of Mississippi (2)	Nicholas B. Kronwall Tucson,Arizona (S)
University of Missouri	The Boatmen's Nat'l Bk. of St. Louis (S,B)

University of Nebraska	Omaha National Bank (S,B)
University of Notre Dame	Massachusetts Financial Services (B) Brundage, Story & Rose (S) Stein, Roe & Farnham (S) Capital Guardian Trust Co. (S)
University of Oregon Development[(2)] Fund	Capital Research & Management Co. (S,B)
University of Pennsylvania	Internally Managed
University of Pittsburgh	Mellon Bank (B) Pittsburgh National Bank (B) Neuberger & Berman (S) Brundage, Story & Rose (S) Jennison Associates (S)
University of Puget Sound	Pringle, Flinn, Elvins & Donahue (S,B) Badgley and Phelps (S,B)
University of Richmond	Delaware Investment Advisers (S) Pioneer & ICA Mutual Funds (S) Wheat Advisory Services (S) Putnam Advisory Services (B)
University of Santa Clara[(2)]	McCullough & Andrew Inc. (S,B)
University of Southern California	Western Asset Management Co. (S,B)
University of Tennessee [(2)]	Lionel D. Edie Co. (S)
University of Texas	Internally Managed
University of Tulsa	Bank of Oklahoma (S,B) First National Bank & Trust of Tulsa (S,B)
University of Vermont	Brundage, Story & Rose (S,B) Howard Bank (S,B)
University of Virginia	General American Investments (S) Brundage, Story & Rose (S) John W. Bristol (S) William A. Hobbs (S,B) American National Bank Chattanooga (S,B)
University of Wisconsin Fdn.	Heritage Investment Advisors Inc. Milwaukee (S,B) First Wisconsin Nat'l Bank-Madison (S,B)
University of Wisconsin System	Heritage Investment Advisors (S,B) State of Wisconsin Investment Board

Vanderbilt University	Atlanta Capital (S) Analytic Investors (S) Capital Guardian (S) Edie Assets (B) Invesco (S) Stein, Roe & Farnham (S)
Vassar College	J. W. Seligman & Co. (S,B)
Virginia Military Institute	First & Merchants Nat'l Bk Richmond (S,B) Capitoline Investment Services (S,B)
Wake Forest University	Montag & Caldwell (S,B) T. Rowe Price & Associates (S,B) Lexington Management Corp. (S,B) First Union National Bank (S,B) Sterling Management Inc. (S,B)
Washburn College	Hartford National Bank & Trust (S,B)
Washington State University	Smith Barney, Harris Upham & Co. (S,B) Old National Bank of Washington (B)
Washington University	St. Louis Union Trust Co. (S,B) Mercantile Trust Co. (S,B) Boatmen's National Bank (S,B) Scudder, Stevens & Clark (B) Thorndike, Doran, Paine & Lewis, Inc. (S)
Wellesley College	Internally Managed
Wesleyan University	Brokaw Capital Management (S) Brundage, Story & Rose (S) Drexel Burnham Lambert (S) Scudder, Stevens & Clark (B)
Western Michigan University Fdn.	Stein, Roe, Farnham (S,B) Michigan National Bank (S,B)
Westmar College	Internally Managed
Wheaton College	Internally Managed New England Merchants (S,B)
Whitman College	Internally Managed
Willamette University	Dodge & Cox (S,B) James Miller (S,B) U. S. National Bank-Oregon (S,B)
Williams College	Miller Anderson & Sherrerd (S,B) Scudder, Stevens & Clark (S,B)
Wittenberg University	David L. Babson (S,B)

Worcester Polytechnic Institute	Vilas Fischer Association (S,B) Worcester County National Bank (B)
Yale University	Endowment Management & Research (S,B) Miller Anderson & Sherrerd (S) Fischer, Francis, Trees & Watts (B) Wells Fargo (S) Connecticut Bank & Trust (S,B) Lord Abbott (S)

Note 1: Internally Managed institutions have no more than 20 percent of total assets managed externally.

EXHIBIT VI

INDEX OF ENDOWMENT CUSTODIANS (1)

Institution	Custodian
Academy of the New Church	IVB Bank
Agnes Scott College	Trust Company Bank-Atlanta
Albion College	National Bank of Detroit
Alfred University	Chemical Bank of New York
Allegheny College	First National Bank-Pennsylvania Mellon Bank
Alma College	Paine Webber Jackson & Curtis, Inc.
American University	American Security Bank Drexel Burnham Lambert
Amherst College	United States Trust Company
Arizona State University	Northern Trust Company
Baldwin-Wallace College	AmeriTrust Company
Baylor College of Medicine	Bank of the Southwest Baptist Foundation of Texas
Berea College	First Kentucky Trust-Louisville Harris Trust First National Bank of Cincinnati
Berry College	Trust Company of Georgia
Boston University	Boston Safe Deposit & Trust Company
Bowdoin College	State Street Bank & Trust Company Manufacturers Hanover Trust Company
Brandeis University	First National Bank of Boston
Bryn Mawr College	J & W Seligman
Bucknell University (2)	Morgan Guaranty Trust
California Institute of Technology	Security Pacific National Bank
Carleton College	Northwestern National Bank of Minneapolis New England Merchants Bank, Boston Brown Brothers Harriman
Carnegie-Mellon University	Mellon Bank Pittsburgh National Bank

Carroll College	Marshall & Isley Bank First National Bank of Minneapolis
Case Western Reserve University	Citibank of New York
Catholic University of America	MSD & TCO
Claremont Men's College	Security Pacific National Bank
Clark University	Guaranty Bank & Trust
Clarkson College of Technology	Marine Midland Bank
Colby College	Bankers Trust Depositors Trust Company
College of Wooster	First Trust Company of Ohio
Colorado College	First National Bank of Colorado Springs First National Bank Denver
Columbia University	Manufacturers Hanover Bank
Columbia University-Teachers College	Morgan Guaranty Trust Company Connecticut Bank & Trust
Connecticut College	Hartford National Bank & Trust Analytic Investment Management Co.
Cooper Union	United States Trust
Cornell College	Merchants National Bank
Cornell University	Morgan Guaranty Trust Company
Dartmouth College	Chase Manhattan Bank
Davidson College	NCNB Northwestern Bank Wachovia Bank
Denison University	Ameri Trust Company National City Bank
Dickinson College	American Bank & Trust Company
Doane College	Hartford National Bank National Bank of Commerce First National Lincoln
Drake University	Harris Trust & Savings Bank Iowa Des Moines National Bank
Drew University	Bankers Trust Company
Duke University	Wachovia Bank Morgan Guaranty Trust Company

Earlham College	Second National Bank Richmond Ind. First National Bank Richmond Ind.
Emory University	Trust Company of Georgia
Franklin and Marshall College	Hamilton Bank Mercantile Safe Deposit & Trust Co.
Furman University	South Carolina National Bank
Georgetown University	Chase Manhattan Bank Riggs National Bank American Security & Trust
George Washington University	Riggs National Bank
Georgia Institute of Technology	Trust Company Bank First National Bank
Hamilton College	Irving Trust Company Bank of New York
Hampton Institute	United States Trust Company
Harvard University	State Street Bank & Trust Company
Haverford College	United States Trust Fidelity Bank
Hendrix College	Commercial National Bank
Hobart and William Smith Colleges	Security Trust Company Central Trust
Hollins College	FNEB Capitoline
Hope College	Old Kent Bank & Trust First Michigan Bank & Trust
Indiana University	Indiana National Bank American Fletcher National Bank Merchants National Bank
Johns Hopkins University	Fiduciary Trust Company of New York First National Bank of Maryland
Kalamazoo College	First National Bank of Boston
Kenyon College	AmeriTrust Company Ohio Citizens, Toledo BancOhio
Lehigh University	Morgan Guaranty Trust Company
Loyola University of Chicago	Continental Illinois National Bank & Trust Company Chicago First National Bank of Chicago Chicago Title & Trust

McGill University	Royal Trust Company Bank of New York
Marquette University	Marshall & Ilsley Bank
Massachusetts Institute of Tech.	First National Bank of Boston
Medical College of Pennsylvania	Cooke & Bieler
Mercer University	Internal
Michigan State University	Detroit Bank & Trust Company Ann Arbor Trust
Middlebury College	Chase Manhattan Bank Bank of New York
Mills College	Crocker Bank
Monmouth College	Central Jersey Bank & Trust
Mount Holyoke College	New England Merchants National Bank
Muhlenberg College	First National Bank of Allentown
Northwestern University	State Bank, Evanston Money Market, Savings, Cash
Oberlin College	National City Bank (Cleveland)
Occidental College (2)	Security Pacific National Bank
Ohio Northern University	The Metropolitan Bank Lima National City Bank of Cleveland
Ohio State University	BancOhio National Bank National City Bank Huntington National Bank Neuberger Mutual Fund
Ohio University	Bankone Trust NA of Columbus Lehman Brothers Ohio Company
Oregon State Board of Higher Educ.	First National Bank of Oregon
Oregon State University Foundation	Bank of California First National Bank of Oregon
Pennsylvania State University	Mellon Bank
Pomona College	Bank of America
Pratt Institute	United States Trust

Princeton University	United States Trust Company of N.Y.
Reed College	First National Bank of Oregon
Rensselaer Polytechnic Institute	Harris Bank Bankers Trust Key Bank NA
Rhode Island School of Design	Rhode Island Hospital Trust Nat'l Bk
William Marsh Rice University	Internal
Rochester Institute of Tech. (2)	Lincoln First Bank Central Trust Company Marine Midland Trust Company Security Trust Company
Rockefeller University	Chase Manhattan Bank
Rutgers, The State University	Chemical Bank of New York
St. Norbert College	Citizens Bank of Sheboygan Harris Trust & Savings Bank, Chicago
Simmons College	New England Merchants National Bank
Smith College	Morgan Guaranty Trust Company Bank of New York Northampton National Bank U. S. Trust Company
Southern Methodist University	First National Bank-Dallas
Spelman College	Chase Manhattan Bank
Stanford University	Wells Fargo Bank
State University of N.Y.-Buffalo	Manufacturers & Traders Trust Co. Marine Midland Bank
Stephens College	E. F. Hutton
Swarthmore College	Girard Bank Fidelity Bank Provident National Bank
Sweet Briar College	United Virginia Bank
Syracuse University	Key Bank of Central New York
Temple University	Girard Bank
Thomas Jefferson University	First Pennsylvania Bank N.A.
Trinity College (Hartford,Conn)	Hartford National Bank & Trust Co.

Trinity College (Wash., D. C.)	American Security Bank
University of Akron	First National Bank of Akron BancOhio
University of Akron Development Fdn.	BancOhio National Bank Goodyear Bank
University of Arizona	Internal
University of Arkansas	Internal First National Bank-Little Rock
University of Chicago	Morgan Guaranty
University of Cincinnati	First Third Bank-Cincinnati
University of Connecticut	State Treasurer
University of Dayton	Third National Bank & Trust Co.
University of Delaware	Wilmington Trust Company Delaware Trust Company Bank of Delaware Farmers Bank of Delaware
University of Denver	United Bank of Denver First National Bank of Denver Colorado National Bank Mountain States Bank Central Bank & Trust
University of Evansville	Internal
University of Illinois	First National Bank of Chicago
University of Maine	Merrill Trust Company Merchants National Bank State of Maine
University of Maryland	Union Trust Company of Maryland Treasurer of State
University of Miami	Security Trust Company Morgan Guaranty Trust Company-N.Y. Southeast First National Bank-Miami Florida National Bank of Miami
University of Michigan	National Bank of Detroit Detroit Bank & Trust Company
University of Minnesota	First National Bank of Minneapolis Northwestern National Bank of Minneapolis

University of Mississippi	Deposit Guaranty National Bank, Jackson First National Bank-Jackson
University of Missouri	The Boatmen's National Bank State of Missouri
University of Nebraska	Omaha National Bank
University of Notre Dame	Chase Manhattan Bank American Bank, South Bend First Bank, South Bend
University of Oregon Devel. Fd.	American Funds Distributors Inc.
University of Pennsylvania	Fidelity Bank
University of Pittsburgh	Mellon Bank Pittsburgh National Bank
University of Puget Sound	Puget Sound National Bank
University of Richmond	Central Fidelity Bank First & Merchants National Bank
University of Santa Clara (2)	Barclays Bank of California
University of Southern California	United California Bank
University of Tennessee	United American Bank, Knoxville
University of Texas	Treasurer of the State
University of Tulsa	Bank of Oklahoma First National Bank of Tulsa
University of Vermont	Howard Bank First National Bank of Boston
University of Virginia	Fiduciary Trust Company of New York United Virginia Bank American National Bank of Chattanooga
University of Wisconsin	First Wisconsin National Bank
University of Wisconsin System	Treasurer of the State Morgan Guaranty Trust
Vanderbilt University	First American National Bank Chase Manhattan Bank
Vassar College	J & W Seligman & Company
Virginia Military Institute	First & Merchants National Bank United Virginia Bank

Wake Forest University	Wachovia Bank & Trust Company First Union National Bank
Washburn College	Hartford National Bank & Trust Co.
Washington State University	Smith Barney Harris Upham & Company Old National Bank of Washington
Washington University	St. Louis Union Trust Company Mercantile Trust Company Boatmen's National Bank First National Bank DTC
Wellesley College	State Street Bank and Trust
Wesleyan University	U. S. Trust Company Shawmut Bank Neuberger & Berman
Western Michigan University Fdn.	Michigan National Bank
Westmar College	Internal
Wheaton College	New England Merchants National Bank
Whitman College	Internal
Willamette University	United States National Bank of Oregon
Williams College	U. S. Trust Company of New York Bank of New York
Wittenberg University	Internal
Worcester Polytechnic Institute	Mechanics Bank Worcester County National Bank Guaranty Bank & Trust
Yale University	Chemical Bank Connecticut Bank & Trust

Note 1: Internal means an institution serves as custodian for at least 80 percent of its assets.

Note 2: Institution serves as custodian for at least 50 percent of assets, and at least 20 percent of assets are external.

APPENDIX I

EXPLANATION OF METHOD USED FOR MEASURING PERFORMANCE OF PORTFOLIO MANAGER

The choice between the geometric average return (average total return) figure and the internal rate of return figure depends on what it is one wishes to measure: the skill of the individual or committee which actually manages the investment of the endowment fund, or the success of the investment management coupled with the decision or policy that governs withdrawal of funds from the endowment (and contribution of funds to the endowment). Both figures are "correct," but the internal rate of return should not be used for judging portfolio management, nor should the geometric average not be used for judging the overall results of portfolio management and decisions on when to add the withdraw funds.

For most endowment funds the geometric average is probably the more important figure. This is particularly true if additions of funds to an endowment and withdrawals of funds do not reflect any judgment skill, but simply follow a policy of adding funds when contributions are received and withdrawing income either when the dividends and interest are received or at predetermined dates. The reason for looking at the internal rate of return in addition to the geometric average is to determine how well the investor is timing additions and withdrawals.

College officials often object to the use of the geometric average, protesting that: "This average assumes that income is reinvested, and we don't reinvest income." It is quite true that they do not reinvest income, but if what is to be determined is the quality of investment performance being achieved by the manager of the endowment fund, then the performance record of the manager should not be penalized by unfortunate timing of withdrawals over which the manager has no control.

Adapted from Performance Measurements and Investment Objectives for Educational Endowment Funds by J. Peter Williamson (New York: The Common Fund, 1972).

APPENDIX II

PERFORMANCE OF POOLED INVESTMENT FUNDS

EXPLANATION OF COMPUTATIONS

The computations required to create the tabular and performance data used in the comparative performance of pooled investment funds are accomplished by a computer program entitled FUNDPER. The program FUNDPER draws on the basic data file compiled for each individual investment pool. Data contain the endowment pool's year-end unit value (at market) and the dollar value per unit of income received for the year. Drawing on the basic file, FUNDPER first creates a yearly chart of tabulated dtat as shown below; for any number of consecutive years within the limits of the basic data file it calculates various performance statistics.

```
                     STATISTICAL SUMMARY SHEET

INSTITUTIONAL CODE NAME - SP5000

COL 1   COL 2       COL 3  COL 4   COL 5       COL 6   COL 7    COL 8
YEAR    BASE        UNIT   APPRE   INCOME      YLD     GRO      TOT RET
                                               PCT     PCT      PCT

 1975    100         95.19
 1976    109.55      104.28  9.09   3.76       3.95     9.55     13.5
 1977    105.56      100.48 -3.8    4.36       4.18    -3.64     0.54
 1978    100.36      95.53 -4.95    4.91       4.89    -4.93    -0.04
 1979    108.11      102.91  7.38   5.29       5.54     7.73     13.26
 1980    120.01      114.24  11.33  5.99       5.82     11.01    16.83

ARITH AVGS 5 YRS ENDING IN 1980                4.88     3.94     8.82
GEOM AVGS                                      4.87     3.72     8.58

APPRECIATION                                           20.01 PERCENT
CORRESPONDING AVG ROR                                  3.72 PERCENT
APPREC WITH INC REINV                                  51.54 PERCENT
CORRESPONDING AVG ROR(AV T/R)                          8.67 PERCENT
```

Exhibit A contains examples of the mathematics used by FUNDPER for that portion of the tabulated data which is computed. The balance of the tabulated data is reproduced from the basic data file.

An explanation of the columns for 1980 in the above chart is as follows:

Col. 1 Fiscal Year: July 1/June 30.

Col. 2 Base: This gives the first year the unit value is available an index of 100 and adjusts the succeeding unit values accordingly. In the above example the first year the S&P 500 unit value figures were available was the fiscal year ending 6/30/75.

Col. 3 Unit Value: Supplied by participating institution.

Col. 4 Appreciation: Appreciation is computed by subtracting the 1979 unit value form the 1980 unit value.

Col. 5 Income Per Unit: Supplied by participating institution.

Col. 6 Yield Percent: Yield percent is computed by taking the 1980 income per unit, dividing it by the 1979 unit value, and multiplying by 100.

Col. 7 Growth Percent: Growth percent is computed by taking the 1980 appreciation, dividing it by the 1979 unit value, and multiplying by 100.

Col. 8 Total Return Percent: Total return percent is computed by adding the 1980 appreciation to 1980 income, then dividing by the 1979 unit value, and multiplying by 100.

Exhibit B contains examples of the mathematics used by FUNDPER in determining arithmetic and geometric averages of yield, growth, and total return for the period specified. They are computed as follows:

1. Arithmetic Average 5 Years Ending 1980: Add either the 5 yearly yield, growth, or total return percentages and divide by 5.

2. Geometric Average 5 Years Ending 1980: Add one to each of the 5 yearly yield, growth, or total return percentages expressed as a decimal, multiply these figures, then take the fifth root of that value, subtract 1, and multiply by 100.

Exhibit C contains examples of the mathematics used by FUNDPER in making comparative performance computations. Using the five-year period 1975-80 as an example, the four comparative performance percentages are computed as follows:

1. Total Percent Appreciation: The total percent appreciation is computed by dividing the 1980 unit value by the 1975 unit value, subtracting 1, and multiplying by 100.

2. Corresponding Annual Geometric Average Growth Rate: The corresponding annual geometric growth rate is computed by taking the fifth root of the 1980 unit value divided by the 1975 unit value, subtracting 1, and multiplying by 100.

3. Total Percent Appreciation with Income Reinvested: The total percent appreciation with income reinvested is calculated as follows:

   a. Determining the number of units that could have been purchased with income of one unit for the year 1975-76, using the average of the 1975 and 1976 unit values as the price of a new unit.

   b. Adding the new units so purchased to the original unit held.

c. Determining the income on the new total units held for the next year 1976-77 calculating the number of units that could have been purchased with income in that year, again using the average beginning and end of year unit values as the price of new units, and so on to the end of the five years, i.e., the end of 1980.

d. Calculating the total value of the units held as of 1980 multiplied by the 1980 unit value, and dividing this by the 1975 unit value, subtracting 1, and multiplying by 100.

4. Corresponding Annual Geometric Average Growth Rate: The corresponding annual geometric average growth rate (with income reinvested) is computed by adding 1 to the total of the units purchased during each of the five years, multiplied by the unit value at the end of 1980, divided by the 1975 unit value, taking the fifth root, subtracting 1, and multiplying by 100.

Exhibit A (APPENDIX II)

Tabulated Data Computations

Col. 4 Appreciation

1980 Unit Value - 1979 Unit Value
114.24 - 102.91 = 11.33

Col. 6 Yield Percent

(1980 Income/1979 Unit Value) X 100
(5.99/102.91) X 100 = 5.82%

Col. 7 Growth Percentage

(1980 Appreciation/1979 Unit Value) X 100
(11.33/102.9) X 100 = 11.01%

Col. 8 Total Return Percent

(1980 Appreciation + 1979 Income)/1979 Unit Value X 100
[(11.33 + 5.99)/102.91] X 100 = 16.83%

Exhibit B (APPENDIX II)

Arithmetic and Geometric Averages

Arithmetic Average Total Return Percentage*

(Total Return Percentage for 1975-76 + 1976-77 + 1977-78 + 1978-79 + 1979-80)

$$\frac{13.63 + .54 + (-.04) + 13.26 + 16.83}{5} = 8.82\% \text{ for 5 years ending June 30, 1980}$$

Geometric Average Total Return Percentage*

(([Total Return for (1975-76 + 1) X (1976-77 + 1) X (1977-78 + 1) X
(1978-79 + 1) X (1979-80 + 1)] ↑ (1/5)) - 1) X 100

(([(.1350 + 1) X (.0054 + 1) X (-.0004 + 1) X (.1326 + 1) X (.1683 + 1)]
↑ (1/5)) - 1) X 100 = 8.58%

*Note: Average yield and growth percentages are calculated in the same manner.

Exhibit C (APPENDIX II)

Comparative Performance Measurement Computations

1. **Total Percent Appreciation**

$$\left(\left(\frac{1980\ \text{Unit Value}}{1975\ \text{Unit Value}}\right) -1 \right) \text{X } 100$$

$$\left(\left(\frac{114.24}{95.19}\right) -1 \right) \text{X } 100 = 20.01\%$$

2. **Corresponding Annual Geometric Average Growth Rate Percentage**

$$\left(\left(\left(\frac{1980\ \text{Unit Value}}{1975\ \text{Unit Value}}\right) \uparrow (1/5) \right) -1 \right) \text{X } 100$$

$$\left(\left(\left(\frac{114.24}{95.19}\right) \uparrow (1/5) \right) - 1 \right) \text{X } 100 = 3.72\%$$

3. **Total Percent Appreciation with Income Reinvested**

$$\frac{(1976\ \text{Income})}{\text{Average of 1975 and 1976 Unit Values}} = \text{Units Purchased with 1975 Income}$$

$$\frac{3.76}{(95.19 + 104.28)} = .03770\ \text{Units}$$

$$\frac{(1 + \text{Units Purchased with 1976 Income}) \text{ X } 1977\ \text{Income Per Unit}}{\text{Average of 1976 and 1977 Unit Values}} = \text{Units Purchased with 1977 Income}$$

$$\frac{(1 + .03770) \text{ X } 4.36}{(104.28 + 100.48)/2} = .04419$$

Exhibit C (APPENDIX II)--Continued

$$\frac{\text{1 + Units Purchased with 1976+ 1977 Income) X 1978 Income Per Unit}}{\text{Average of 1977 and 1978 Unit Values}} = \text{Units Purchased with 1978 Income}$$

$$\frac{(1 + .03770 + .04419) \times 4.91}{(100.48 + 95.53)/2} = .05420 \text{ Units}$$

$$\frac{\text{1 + Units Purchased with 1976 + 1977 + 1978 Income) X 1979 Income Per Unit}}{\text{Average of 1978 and 1979 Unit Values}} = \text{Units purchased with 1979 Income}$$

$$\frac{(1 + .03770 + .04419 + .05420) \times 5.29}{(95.53 + 102.91)/2} = .06057 \text{ Units}$$

$$\frac{\text{(1 + Units Purchased with 1976 + 1977 + 1978 + 1979 Income) X Income Per Unit}}{\text{Average of 1979 and 1980 Unit Value}} = \text{Units Purchased with 1980 Income}$$

$$\frac{(1 + .03770 + .04419 + .0520 + .06057) \times 5.99}{(102.91 + 114.24)/2} = .06602 \text{ Units}$$

$$\left[\left[\frac{\text{(1 + Units Purchased with 1976 + 1977 + 1978 + 1979 + 1980 Income) X 1980 Unit Value}}{\text{Unit Value for 1974-75}}\right] - 1\right] \times 100 =$$

$$\left(\left(\frac{(1 + .03770 + .04419 + .0520 + .06057 + .06602) \times 114.24}{95.19}\right) - 1\right) \times 100 = 51.54 \text{ Appreciation with Income Reinvested}$$

Appreciation with Income Reinvested

4. Corresponding Annual Geometric Growth Rate

$$\left[\left[\left[\frac{\text{(1 + Total of Income Units Purchased from 1976 thru 1980) X 1980 Unit Value}}{\text{1975 Unit Value}}\right] \uparrow (1/5)\right] - 1\right] \times 100$$

$$\left[\left[\left[\frac{(1 + .03770 + .04419 + .0520 + .06057 + .06602) \times 114.24}{95.19}\right] \uparrow (1/5)\right] - 1\right] \times 100 = 8.67\%$$

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(AV T/R)

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